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**DOD DEPOT-LEVEL MAINTENANCE:
FACTORS TO CONSIDER IN
PUBLIC / PRIVATE COMPETITION**

by

William M. Ford

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Principal Advisor:

David V. Lamm

Associate Advisor:

Mark W. Stone

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PUBLIC / PRIVATE COMPETITION**

William M. Ford
Major, United States Army
B.B.A., North Georgia College, 1983

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December 1998

Author:

William M. Ford

William M. Ford

Approved by:

David V. Lamm

David V. Lamm, Principal Advisor

Mark W. Stone

Mark W. Stone, Associate Advisor

Reuben T. Harris

Reuben T. Harris, Chairman,
Department of Systems Management

ABSTRACT

Government arsenals and depots have traditionally provided DoD with a controlled source of depot-level maintenance capability. With the Cold War over and a shift in national priorities, DoD looks for cost savings and improved efficiency to save its shrinking budget dollars. As it looks for new ways of doing business, DoD looks to outsourcing as an option for depot-level maintenance, but is limited by statutory restrictions on such outsourcing. Both the policy and procedures remain hotly contested issues. When conducting the study to compete public and private capability, several factors and options should be considered throughout the overall process from the requirements determination to the final source selection. An important finding of this research is that particularly for new weapons systems, it is that the Services are often rushing to outsource without considering life-cycle costs and other key factors. Recommendations to improve the process are to: establish a better definition of core, enforce life-cycle determination, make use of in-house excess capacity, maximize the use of partnering, improve training for those involved in preparing the in-house MEO estimate, outsource A-76 support, and continue to improve upon Government accounting procedures.

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I. INTRODUCTION

A. BACKGROUND

With the demise of the Soviet Union and the end of the Cold War, the United States' need for a massive "arsenal of democracy" vaporized. With a three trillion dollar debt, the priority became reduction of the Federal deficit [Ref. 70:p. 2]. It was time for DoD to pay the "peace dividend" as the defense budget was slashed to its lowest point since before Pearl Harbor [Ref. 11:p. 18]. To achieve these dividends, force structure was cut, and the scope of the ongoing Base Realignment and Closure (BRAC) process was broadened to encompass more of DoD's least efficient depots [Ref. 70:p. 2]. DoD looked for more cost efficient ways of doing business, as more functions previously performed by the Government were outsourced [Ref. 69:p. 1].

DoD continues to be increasingly reliant on the commercial markets to provide the non-core support for the military [Ref. 57:p. 4]. However, in the area of depot-level maintenance, this reliance comes directly into conflict with statutory limitations on depot-level maintenance outsourcing, originally designed to ensure readiness, protect national security, and allow for required surge capacity in the event of national conflict [Ref. 61:p. 2]. The United States Code revised in 1998, allows for no more than 50% of depot-level maintenance to be performed by the private sector [Ref. 61:p. 2].

DoD and industry favor either increasing the percentage allowed for outsourcing or deleting the law altogether while Congress, Government logisticians, and others are in opposition to such changes [Ref. 22:p. 26]. Industry executives claim that they can do the

work more efficiently and provide examples to prove their point [Ref. 11:p. 11]. Congress and opponents contend that industry has provided savings to DoD, but in areas requiring low capital outlay which are in highly competitive markets while similar savings in depot maintenance are much less apparent [Ref. 57:p. 44].

Nonetheless, this restriction greatly affects the options available to DoD when making a source determination for depot-level maintenance. Many feel that we should update our response to be more inline with best business practices similar to those in industry in order to moderate the cost of maintaining DoD's high-tech weapon systems [Ref. 75:p. 19].

B. PURPOSE

The purpose of this research paper is to examine current DoD policy and procedures in making source determinations for depot-level maintenance. It reviews the current law restricting such outsourcing and looks at the pros and cons of using public depots versus outsourcing to private sources. It then analyzes the research data, to recommend factors that should be considered when making depot-level maintenance source determinations. Finally, it recommends areas for change in current policy and procedures for optimum benefit to DoD, the Government, and the taxpayer.

C. RESEARCH QUESTIONS

In order to accomplish the purpose of this research the following primary and subsidiary research questions were established:

1. Primary Research Question

What factors should be considered when determining the source for depot-level maintenance services for the Department of Defense (DoD)?

2. Secondary Research Questions

- a. What is the current policy towards determining the source for depot-level maintenance in DoD?
- b. How does current policy affect outsourcing of depot maintenance?
- c. What are the current procedures for public/private competition?
- d. How do current procedures for public/private competition impact outsourcing of depot-level maintenance?

D. SCOPE AND LIMITATIONS

This research addresses the policy and procedures in making source determinations for depot-level maintenance for combat systems for DoD. It recommends factors to be considered in the source determination process. Though it does make recommendations that can affect future policy and A-76 procedure changes, it is not written to replicate step-by-step specific procedures found in OMB Circular A-76. It also does not address levels of maintenance below the depot-level such as organizational and unit.

E. ASSUMPTIONS

This study assumes that the reader is generally familiar with the Federal Government Acquisition process.

F. METHODOLOGY

This research paper provides a background on outsourcing of depot-level maintenance. It addresses positions both for and against further outsourcing. It then analyzes the current procedures for public/private competition (the A-76 process) as it applies to depot-level maintenance. This is accomplished through literature research including but not limited to, the following:

- Unclassified Department of Defense Publications
- General Accounting Office reports and testimony before Congress
- Published academic research papers
- Published references available at the Naval Postgraduate School library
- Electronic data sources; internet websites
- Magazine and newspaper articles

The research included a survey questionnaire to selected military officers and Government civilian officials in selected DoD and service component agencies, as well as key defense industry officials to get opinions and recommendations on changes to policy and procedure as well as factors to consider in the source determination process.

Upon analysis of the interviews and literature, recommendations are presented on key factors to consider when determining the supplier for depot-level maintenance for DoD.

G. KEY DEFINITIONS

The following are key definitions and clarifications as they apply to this research paper:

- **Commercial Activity** - an activity that provides services obtainable from the private sector. Examples of commercial activities include custodial services, grounds maintenance, base supply, vehicle operations and maintenance [Ref. 70:p. 1].
- **Depot-Level Maintenance** - the most complex level of maintenance. It includes repair, rebuild, upgrade, major overhaul, modifications, testing, manufacture of parts, reclamation and software maintenance [Ref. 70:p. 1].
- **Inherently Governmental** - functions which if outsourced, create an unacceptable risk to the security of the United States. These functions are so intimately related to the public interest that they mandate performance by the Government [Ref. 4:p. 92].
- **Inter-Service Support Agreement (ISSA)** – An agreement between the Services in which one usually provides a service to the other or allows use of contracted services to be shared. In exchange, the other Service may provide a transfer of budget dollars or other perform other services in compensation [Ref. 36:p. 4].
- **Outsourcing** – the operation of a commercial activity for the Government by a contractor. Essentially characterized by the award of a contract for a specific period of time. The activity may be performed at the contractor's or Government's facility. If at the Government facility, the Government retains ownership and control over operations [Ref. 14].

- **Privatization** – the operation of a commercial activity for the Government by a contractor where the Government divests itself of the commercial activity. The Government may specify quantity, quality, and timeliness requirements for purchased goods and services, however, it has no control over the operations of the activity [Ref. 14].

H. BENEFITS OF THIS STUDY

The results of this study can be used for guidance in making source determinations for depot-level maintenance and may provide assistance in the A-76 process. In addition, it may be used as a potential foundation for modification of current DoD policy and procedures for private/public competition and to current law on depot maintenance outsourcing limitations.

I. ORGANIZATION OF STUDY

- Chapter I. Introduction: This Chapter identifies the purpose of the thesis, primary research questions, the methodology and the potential benefits of this study.
- Chapter II. The Depot System and Depot Maintenance Policy: Restrictions on Outsourcing: This Chapter provides background on the depot system and related depot maintenance policy.

- **Chapter III. Public / Private Competition: the A-76 Process:** This Chapter discusses the A-76 process for public/private competition and its applicability to depot maintenance.
- **Chapter IV. Point - Counter Point: Public Depots versus Private Industry:** This Chapter discusses the positions used by both the public depots and private industry and provides a response from the opposing view.
- **Chapter V. Interviews and Survey:** This Chapter presents the data from surveys and interviews to military, Government civilian and industry personnel and analyzes the results.
- **Chapter VI. Analysis: Factors to Consider in Making Depot-Level Maintenance Source Determinations:** This Chapter addresses factors and options that should be considered in making depot-level maintenance source determinations.
- **Chapter VII. Conclusions and Recommendations:** This Chapter summarizes the findings of the research, develops conclusions, makes key recommendations and answers the research questions.

II. THE DEPOT SYSTEM AND DEPOT MAINTENANCE POLICY: EVOLUTION OF POLICY AND RESTRICTIONS ON OUTSOURCING

A. INTRODUCTION

Government arsenals and depots have always provided a ready and controlled source for depot-level maintenance and repair of DoD's military hardware. Laws and restrictions have protected the majority of depot-level maintenance at these Government facilities. With the Cold War over and a shift of national interest, DoD's focus is now on cost savings. With its depots operating at only 60% capacity, DoD has come under increased pressure to become more efficient. As it looks for new ways of doing business, DoD focuses on outsourcing and privatization as options to provide depot-level maintenance at lower costs and for better value [Ref. 57:p. 45].

The purpose of this chapter is to provide a background and brief history of the defense depot system and the evolution of policy regarding depot-level maintenance with regard to outsourcing. It further addresses current DoD maintenance policy and provides guidance regarding the split of maintenance requirements between the public and private sectors.

B. THE DEPOT SYSTEM

1. The Beginning

The Federal Government has relied upon the private sector to supply goods and services to support its Armed Forces since the Revolutionary War when the Navy

contracted for help in building the U.S.S. Constitution. [Ref. 11:p. 8] As our country grew, the private sector was not always fast enough to provide the strategic logistic support required. This was particularly the case during the War of 1812 where our under strength and poorly supplied military forces faced significant early setbacks from a much smaller but better prepared enemy [Ref. 26:p. 8]. Not wanting to be so unprepared again, the War Department placed increased emphasis on strategic logistic sustainment and some Government depots were created [Ref. 11:p.10].

2. World War II and Cold War

The emphasis on Government depots waned over the years until World War II. At the start of the war, the United States was once again caught off guard and woefully unprepared. The ramp up for war was now more than cannon balls and wooden frigates. Industry was not ready for such a massive mobilization in such a short time frame. To further exacerbate the problem, a few companies refused to convert to war production. The “War Powers Act” was used during the war in part to ensure industrial capability. As part of the Act, uncooperative companies were seized to forcibly convert them to war production [Ref. 72].

Saying “never again”, Government depots, arsenals, ammunition plants, and shipyards spread across the country to guarantee sustainment of our fighting forces and the security of the United States. Even after WWII, the requirement remained with an even greater threat from a nuclear Soviet Union. Depots were our insurance policy to guarantee that critical facilities were in place and operational to sustain a sizeable military force in the event of a protracted engagement with the Soviet Union [Ref. 2:p: A-1]. In

1987, at the height of the Cold War, DoD had 38 operational depots and shipyards with 156,000 Federal employees [Ref. 70:p.3].

3. Depot System Today

With the Cold War over, national priorities changed with the decreased military threat and declining defense budget. DoD's share of the budget was slashed requiring the utmost efficiency for a drastically smaller military force [Ref. 29:p 13]. The Base Realignment and Closure (BRAC) process was established to eliminate unnecessary military and support infrastructure [Ref. 32:p. 746]. Inefficient bases were selected for closure under the BRAC and DoD's force structure shrank as did the support requirements. As of 1998, only 22 of the 38 depots remain in DoD [Ref. 61:p. 1] and of these only 19 are slated to survive the BRAC by 2001 [Ref. 70:p. 2].

The Department of Defense currently spends about \$13 billion annually for depot maintenance work to maintain 52,000 combat vehicles, 351 ships and 17,000 aircraft in its 22 remaining maintenance depots. Of this total, approximately 40% of all depot maintenance requirements are performed by private industry, accomplished by 1,100 prime and subcontractors [Ref. 61:p. 2].

C. EVOLUTION OF DEFENSE DEPOT MAINTENANCE POLICY

1. Creation of the “60/40 Rule”

Up until the late 1980's, public depot maintenance was preferred by the Services to maintain its combat equipment. In 1987, 75% of all new weapon systems being developed were planned to be supported by the public depots [Ref. 62:p. 9].

Realizing the importance of industry and at the same time ensuring defense industrial preparedness, Public Law 10 United States Code 2466 was created which allowed industry to compete for up to 40% of the dollars budgeted for depot maintenance. It thus became known as the “60/40 Rule”. [Ref. 61:p. 2]. It allowed for competition from the private sector but maintained a 60% majority of the maintenance to be performed in the public depots. The limitations on private outsourcing were designed to maintain a core capacity, ensure readiness, and maintain an adequate industrial preparedness in the event of war [Ref. 57:p.13].

2. Post Cold War

In 1988, the United States began a draw down of its military forces. Simultaneously, the military was undergoing a Base Realignment and Closure (BRAC) process. These efforts were designed to “right size” military structure to more efficiently meet the requirements of national defense. With the internal collapse of the Soviet Union shortly thereafter, additional bases and facilities were added to the BRAC list [Ref. 33:p. 8]. Since then DoD has borne the brunt of all Federal spending cutbacks resulting in four rounds of base closures and the loss of some 355,000 civilian and 743,000 military jobs [Ref. 8:p. 54].

The “60/40 Rule” remained a hotly contested issue with DoD and industry supporting increased private competition, and the majority of Congress, Government logisticians and depot employees opposing this position [Ref. 57:p. 17]. “One hundred percent of our depot-level maintenance should be outsourced since industry has the trained people, the up-to-date equipment, the technology, and in most cases are the

original manufacturers of the equipment" stated by Rear Admiral George Wagner, U.S. Navy (retired) a staunch outsourcing supporter [Ref. 73]. On the other hand; "Arsenals are always available in an emergency and can respond to any requirement our troops might have", a key argument in opposition of further outsourcing as stated by Congressman Jim Leach, R-Iowa [Ref. 35:p. 3].

3. Efforts to Cut Costs

With cost savings a priority, DoD has taken huge steps to reduce costs. Regarding depot-level maintenance, the BRAC has closed 14 depots and arsenals and the number of depot employees has been slashed by 50% from 147,000 in 1990, to about 76,000 civilian personnel in 1997 as the remaining facilities continuously get more efficient [Ref. 62:p. 4].

Elsewhere, DoD continues to cut costs. The force structure has been reduced by a third (over 700,000 personnel) and defense spending as a percentage of Gross Domestic Product (GDP) is at its lowest level since before World War II [Ref. 76:p. 24]. In addition, all Services have greatly reduced spare parts inventories to below \$71 billion from a 1989 level of \$103 billion and are expected to have reduced to the \$55 billion level by the end of 1998 [Ref. 39:p. 27].

DoD has even cut costs in the areas where workload is clearly increasing, such as contracting and auditing, due to increased outsourcing. From fiscal year 1993 to July 1997, the Defense Contract Audit Agency (DCAA) and the Defense Contract Management Command (DCMC) reduced their personnel levels by more than 18 and 24 percent respectively [Ref. 39:p. 27].

Despite the cost savings and improvements made in Government depots and arsenals, 40% excess capacity remains: 33% in Naval aviation, 35% in Naval shipyards, 45% in the Air Force, and 42% in the Army, forcing still further efficiency improvements [Ref. 57:p. 45].

4. Business Approach and Increased Outsourcing

With these efforts to save money and become more efficient, DoD has focused on a more “businesslike” approach to achieve cost savings and efficiency. More and more functions previously performed by the U.S. Government have been outsourced or privatized. DoD’s policies have placed greater emphasis on using the private sector for commercial goods and services. The private sector began to gain more and more of the depot-level maintenance work from the public depots, exceeding beyond the 40% limitation [Ref. 61:p. 2].

Projections made in 1997 during the debate on the “60/40 rule” by proponents of increased outsourcing predict that with outsourcing restrictions reduced or eliminated, private depot maintenance would increase DoD wide, from 40% in 1997 to 54% in 2001. Figure 2-1 examines each Service. The results indicate an increase from 31% to 46% for the Army, 46% to 65% for the Air Force, and 39% to 50% for the Navy. A decrease is projected for the Marine Corps, from 23% to 19% due to small workloads making most outsourcing cost prohibitive [Ref. 2:p. A-2].

PROJECTED OUTSOURCING TO 2001

	Budget in Billions		% Outsourced	
	1997	2001	1997	2001
Army	\$1.27	\$1.16	31	46
Air Force	\$3.7	\$3.7	46	65
Navy	\$5.31	\$5.94	39	50
Marine Corps	\$0.21	\$0.19	23	19
DOD Wide	\$10.49	\$10.99	40	54

(Percentages are weighted by budget dollar amount)[Ref. 2:p. A-2]

Figure 2-1

D. CURRENT DEFENSE DEPOT MAINTENANCE POLICY

Policy on depot maintenance has been somewhat confusing and in some cases contradictory depending on the source of the policy [Ref. 62:p. 17]. Though revisions of certain DoD directives and regulations have attempted to resolve some of the confusion, problems remain and is evident by actions taken by new major system program managers and logistics officials [Ref. 69:p. 20].

1. Changing Paradigm in Favor of the Private Sector

The new model for managing depot-level maintenance is evolving. DoD continues to use a combination of public and private sources however, DoD is clearly moving towards a shift in favor of the private sector when readiness, sustainability, and technology risks can be overcome [Ref. 60:p.1]. The depots are forbidden from bidding on non-core workloads where “adequate competition” exists, even if the depot can offer the most cost-effective source of repair [Ref. 60:p. 3].

2. Core Competencies

DoD emphasizes that depot maintenance is, and continues to be, vital to our country's national security. DoD cites responsive capabilities to ensure readiness and sustainability during both peace and war as the purpose of depot maintenance. DoD however, does not mandate who must provide this critical service [Ref. 70:p. 6]. Instead, it delegates to each of the Service Components responsibility to provide an adequate program for maintenance of assigned material in accordance with specific policies.

DoD directs that each Service must establish core depot maintenance capabilities to meet the wartime demands, promote competition, and sustain institutional expertise. DoD defines core as, [Ref. 70:p. 8]:

The capability maintained within organic Defense depots to meet readiness and sustainability requirements of the weapon systems that support the Joint Chiefs of Staff (JCS) contingency scenario(s). Core exists to minimize operational risks and to guarantee required readiness for these weapon systems. Core depot maintenance capabilities will comprise only the minimum facilities, equipment, and skilled personnel necessary to ensure a ready and controlled source of required technical competence. Depot maintenance for the designated weapon systems will be the primary workloads assigned to DoD depots to support core depot maintenance capabilities.

DoD further states:

It is important to note that not all critical or mission-essential weapon systems and equipment will necessarily be maintained in organic depot maintenance facilities, but the capability to perform depot maintenance on designated weapon systems must be maintained organically. Simply put, core represents the minimum amount of maintenance capability that the DoD Components must maintain in organic depot facilities to ensure that contingency operations are not compromised because of a lack of essential depot maintenance support [Ref. 54:p. 9].

DoD has developed a standard methodology to determine what core capability is required. First, each Service determines its core capability. The sum of the total becomes DoD's core base. The Services then conduct a private-sector value assessment to determine industry's ability to assume some of the workload. A risk analysis is then conducted for essential workloads that have historically required retention as core capability to determine acceptable outsourcing risk. Workloads not required to sustain core do not require a risk assessment [Ref. 33:p. 10].

The controversy of exactly what constitutes core is still vague and subject to interpretation. A pro-outsourcing defense reform group called the Business Executives for National Security (BENS), estimates that 70 percent of DoD's budget, or about \$172 billion, goes into infrastructure which is non-core business [Ref. 8:p. 55]. Senior Pentagon officials agree with BENS that it is in the nation's best interest to direct more nonmilitary business to the private sector [Ref. 8:p. 56]. However, in stark opposition, the majority of Congress believes that the vagueness in core determination has the opposite affect. By not clearly identifying its core workload DoD runs a risk of undercutting the materiel readiness of the force [Ref. 9:p. 66].

3. Guidance for Maintenance Decisions

DoD Directive 4151.18 dated 12 August 1992 supports DoD's core policy and provides detailed implementing instructions for maintenance decisions [Ref. 16]. It requires the Services to employ a deliberate, business case analysis process in deciding whether to support new weapons systems and subsystems in public depots or in the private sector [Ref. 62:p. 18]. It requires considering factors such as cost, mission

essentiality, core requirements, existing public and private capabilities, and customer requirements [Ref. 52:p. 18].

4. Source-of-Repair Policy

Issued in March 1996, DoD Regulation 5000.2-R was designed to provide policy guidance on source-of-repair decision [Ref. 17]. Its original form made little account of core policy and it addressed cost comparisons poorly. It stated that “long-term contractor support is the preferred approach for new and modified systems” [Ref. 62:p. 17]. It required an approved waiver from the acquisition approval authority if public depot support was to be used. It mentioned core capability but used the manufacturer’s existing production capabilities as a primary consideration assuming contractor support to be the most cost-effective option [Ref. 17]. After significant Congressional criticism, OSD revised DoD 5000.2-R in October 1997 to place more emphasis on core and remove the waiver requirement [Ref. 62:p. 17].

GAO found that logistics officials responsible for prescribing source-of-repair guidance continue to express concern that despite the 1997 revision, there is still no requirement for a deliberate weighing of factors in making a source-or-repair decision. [Ref. 62:p.17].

5. The 1998 Defense Appropriations Act

The FY98 Defense Appropriations Act, signed on 18 November 1997, amended 10 U.S.C. 2466 easing up on the “60/40 Rule” by increasing the percentage of work that can be contracted out to 50% for each respective Service [Ref. 62:p. 2]. It also established a statutory definition of depot-level maintenance and repair work that includes

interim contractor logistics support [Ref. 58:p. 1]. The code defines depot-level maintenance to include [Ref. 54]:

- a. The overhaul, upgrading or rebuilding of parts, assemblies, or subassemblies
- b. Testing and reclamation of equipment
- c. All aspects of software maintenance classified by DoD as depot-level maintenance services as of 1 July 1995
- d. Interim contractor support and contractor logistics support

It also specifically excludes from depot-level maintenance the following [Ref. 54]:

- a. Workloads that include the procurement of major modification or upgrades of weapon systems that are designed to improve system performance
- b. The procurement of parts for safety modifications
- c. The nuclear refueling of aircraft carriers [Ref. 62:p. 3]

6. Public versus Private Source Decisions

DoD provides further policy and guidance for the Services in determining how to allocate depot maintenance workloads between public and private sources and how to reduce risk from outsourcing. The following items are identified in this policy [Ref. 33:p.11]:

- a. Structure depot maintenance support capabilities to provide essential levels of readiness and sustainability.
- b. Support depot maintenance workloads using a mix of both public and private sector capabilities.

- c. Make “best value” a primary consideration in satisfying workload requirements other than those necessary to sustain core capabilities.
- d. Use evaluation procedures for depot maintenance workload competitions that provide for comparable as well as comprehensive costs for the public sector.
- e. Establish and monitor performance metrics for both organic and contract depot maintenance operations.
- f. Establish financial management processes that provide accurate and comprehensive reporting of depot maintenance efforts at both macro and workload levels.
- g. Ensure that organic depots can compete with private sector sources of repair when there does not appear to be adequate competition for specific DoD workloads within the private sector (restricting from competition those depots being closed).
- h. Permit organic depots to sell services and goods, when appropriate, to other Federal Agencies and the private sector in support of DoD requirements.
- i. Accomplish weapon system modifications and upgrades in the private sector except when it is more efficient and economical to accomplish such work concurrently with other organic maintenance.
- j. Ensure that in placing workloads in the private sector, DoD receives gains that are typically made possible by the operation of market forces.
- k. Plan on supporting new or developing weapon systems in the private sector consistent with DoD core policy.

1. Encourage best value commercial firms to enter into stable partnerships with organic facilities and to co-use organic capabilities consistent with applicable statutes.
- m. Permit leasing out of under-utilized DoD plants and equipment to contractors consistent with applicable statutes.
- n. Ensure that Government facilities that transition into private sector entities can be reestablished in case of national emergency or nonperformance [Ref. 33:p. 11].
- o. Streamline contract management and oversight activities relying more on competitive market forces to assure quality and reasonable price [Ref. 58: p. 1].

Overall guidance provides greater emphasis on “best value” and focuses primarily on ways to increase outsourcing of depot-level maintenance while at the same time improving efficiency in existing depots [Ref. 33:p. 11].

7. Recommended Changes to the 1999 Defense Authorization Bill

The 1999 Defense Authorization Bill encompasses several changes affecting depot-level maintenance. As of the date of this writing, it is still being negotiated between Congress and the President. It places a floor on the number of public/private competitions for the next six years and waives some requirements for small conversions. At the same time, it also places several additional restrictions and requirements to outsourcing [Ref. 55]. Those changes affecting depot-level maintenance include:

a. Encouraging Best Value. Section 346 allows for competition to be awarded under best value and waives reporting requirements for studies done on functions performed by 50 or fewer civilian employees [Ref. 55:sec 346].

b. Places a floor on total public/private competitions. Section 346 requires DoD to conduct A-76 studies for “functions of the Department of Defense involving not fewer than a number of employees equivalent to 30,000 full-time employees for each fiscal year from 1999 through 2004”. This sets a minimum amount of A-76 studies that must be conducted for the next six years in an effort to ensure DoD compliance [Ref. 55:sec 346].

(For more details on A-76 see Chapter III).

c. Increases requirements on maintenance of systems designated as commercial items. Section 343 amends 10 U.S.C. 2464 to state that the first time a weapon system or other type of military equipment is determined to be a commercial item, the Secretary of Defense must notify Congress of the determination and provide justification to include a cost/benefit analysis comparison between the private sector and in-house depots [Ref. 55:sec 343].

d. Increases requirements for prime vendor selections. Section 346 requires a life cycle cost/benefit analysis to be performed and submitted to Congress prior to entering into a prime vendor agreement [Ref. 55:sec 346].

e. Increased requirements when converting to contractor performance. Section 342 requires additional reporting to Congress when considering outsourcing of a commercial or industrial function which has been performed by DoD civilian employees [Ref 55:sec 342].

f. Requires in-house capability study for the C-17. Section 351 requires the Air Force to submit a plan for establishment of core logistics capabilities for the C-17 which is currently being performed by the contractor [Ref 55:sec 351].

E. NEW MAJOR SYSTEM SOURCE-OF-REPAIR DECISIONS

1. Greater Reliance on Private Sector

In following DoD's paradigm shift to outsource, future projections of depot-level maintenance for new major systems clearly reflect a greater reliance on the private sector by all Services except the Army. DoD prefers the prime vendor concept where the original equipment manufacturer provides the life-cycle depot-level maintenance. The prime vendor has the expertise, equipment and facilities, and the Government saves upfront from not having to buy technical data rights (see E.4 below) [Ref. 18: p. 45].

Figure 2-2 depicts a GAO study of 71 new weapon system programs and determined that of the 46 programs in which a determination or preference had been made for maintenance support, 33 of the 46 or 65% had indicated a preference for the private sector. Only 13 selected the public sector [Ref. 62:p. 7]. This indicates an obvious turnaround since 1987 when 75% of all new systems' depot-level maintenance was to be supported by public depots with the remainder supported by the private sector or a mix of public and private sources [Ref. 62: p. 9].

Reported Major System Source of Repair Decisions

	Firm / leaning to public sector	Mixed public/private	Firm / leaning to private sector	Undecided	Total
Army	7	2	3	3	15
Air Force	4	3	13	5	25
Navy	2	4	13	3	22
DoD/ BMDO	0	2	5	2	9
Total Programs	13	12	33	13	71
% of Total	18%	17%	47%	18%	

Programs centrally managed by DoD or the Ballistic Missile Defense Organization (BMDO). [Ref. 62:p. 7]

Figure 2-2

2. Failure to Consider Costs

Of significant concern from the 1998 study is that for many programs the Services made no cost consideration nor core assessment for depot-level maintenance. In 40% of the programs, no cost comparisons were done nor were they planned. Some programs determined from the outset that they would use one source of maintenance support over the other and felt that cost analyses were unnecessary. Some pro-private sector responses questioned the need for such studies given DoD's outsourcing initiatives [Ref. 62:p. 11].

3. Failure to Make Core Assessment

An astounding 78% of programs failed to assess core requirements [Ref. 62:p.13]. GAO found that several program officials did not even know what core meant. Others considered the responsibility to conduct such an assessment at a higher level. Where core was considered, some program managers complained of getting mixed messages from logistics officials which contributed to delays and confusion in finalizing support plans [Ref. 62:p.13].

4. Ignoring Technical Data Packages

GAO found that in many programs, the Service did not plan to buy the technical data package associated with the new system that could help avoid a sole-source situation for maintenance [Ref. 62:p.16]. Of the 33 that plan to rely on the private sector, 42% do not plan to buy the technical data package and 36% intend to rely completely on the system's prime contractor under the prime vendor concept. Upon further analysis, GAO determined that lack of technical data was the number one reason for the lack of competition in depot-level maintenance, [Ref. 62:p.16] the primary reason for 91% of such contracts being awarded sole source [Ref. 58:p. 2].

F. CHAPTER SUMMARY

The depot system performed its mission well prior to the end of the Cold War, providing the capability to support the weapon systems and equipment of our Armed Forces in the event of war with the Soviet Union. This system was protected by statutory law, and allowed no more than 40% of requirements to be performed by the private sector.

With the Cold War over, the threat reassessed, and defense budget slashed, DoD's priorities have changed significantly focusing on efficiency and cost savings. To achieve these savings the BRAC has eliminated excess bases and inefficient depots, the depots have improved efficiency and industry has assumed a greater portion of the depot maintenance effort.

DoD policy on depot-level maintenance has changed, with a more businesslike approach, greater attention to best value and a source preference shift from the depots to the private sector. Conversely, Congress continues to protect depot workloads and places restrictions and requirements on outsourcing in an effort to ensure retention of in-house core maintenance capability.

With this somewhat contradictory and confusing policy, the Services may be ignoring key factors essential for an overall best value with the procedures they use in the source determination process. The next chapter will look at this process, recent changes and its limitations.

III. PUBLIC / PRIVATE COMPETITION: DIFFERENCES BETWEEN GOVERNMENT AND INDUSTRY AND THE A-76 PROCESS

A. INTRODUCTION

There are significant differences between the overall objectives of Government and industry which impacts the way they operate. These differences also impact how each determines its core capability and how each makes strategic decisions. When making strategic decisions, costs are important to both, however, key differences between Government and industry make such comparisons less clear.

This Chapter discusses key differences between Government and industry and how they impact strategic "make or buy" decisions. It further discusses differences in the Government accounting system and changes to make it more like that of business. Finally, this Chapter discusses the A-76 process to include recent changes, and discusses controversy remaining in the process.

B. KEY DIFFERENCES BETWEEN GOVERNMENT AND INDUSTRY

1. Differing Objectives

The overall strategic objective of any industry is to make a profit. With increased profits, comes increased stock price, stockholder satisfaction and growth. Therefore the bottom-line is in dollars for both the company considering outsourcing and the prospective companies which could provide the needed product or service.

The strategic objective of Government is not so easily quantifiable. It is not to make a profit but to provide a variety of functions necessary to ensure the overall wellbeing of our country that in most cases, would not be provided by industry alone. These objectives vary with each Federal Agency. In the case of DoD, its objective is to provide for security and defense of the United States from its enemies. Unlike industry, for most of Government, and certainly for DoD, it is difficult to convert the bottom-line into dollars.

2. The “Make or Buy” Decision

When making strategic decisions, industry has much more flexibility than Government. Industry must answer to its stockholders. The shareholders of Government are of course the taxpayers. Therefore the Government must take additional care in its “make or buy” decision, following statutory and regulatory requirements designed largely to look after the taxpayers’ interest.

The starting point most firms use in conducting strategic analysis is to identify the major strengths of the firm and build upon them. The firm then looks at the current and expected future environment in which the company will operate; the competition, Government regulatory climate, changing characteristics of sales and supply markets, as well as other factors which may impact the future of the company. The company then determines its requirements necessary for future operations. These requirements are then compared with existing core competencies to determine if they need to be refined. Those not determined to be core become candidates for outsourcing. [Ref. 15:p. 191].

According to Dobler and Burt, two main factors stand out above all in a “make or buy” decision; cost and availability of production capability [Ref. 15:p. 193]. Other factors include requirements for quality, security, reliability of suppliers, specialized knowledge, facilities limitations, workforce stability and procurement and inventory considerations [Ref. 15:p. 202].

The Government’s “make or buy” policies are governed by policies, regulations and statutory law (see Chapter II). The process is governed by Office of Management and Budget (OMB) Circular A-76, which attempts to adjust for many differences and provide the procedures necessary to make a comparison between the costs and benefits of outsourcing an in-house activity [Ref. 15:p. iii]. The process is time consuming and largely controversial with many obstacles in the way [Ref. 64:p. 2].

3. Accounting Systems

The differences in the objectives between Government and industry have caused some differences in their accounting systems. Since the bottom-line in industry is profitability, its accounting system must be able to determine all direct and indirect costs as accurately as possible. With Government, the focus is not on profit, and until recently there has been little reason to accurately determine all costs, particularly those associated with capital equipment and indirect overhead. In addition, the Government does not pay taxes, nor insurance costs; just some of the reasons that create the need for procedures to allow for a comparison which makes the public and private estimates more equitable [Ref. 64:p. 1].

C. CHANGES IN ACCOUNTING PROCEDURES

With the end of the Cold War and an increased focus in saving defense dollars, the Government has changed much of its accounting procedures to more resemble those of the commercial market but by no means are they the same. Proponents for outsourcing complain that old-fashioned accounting systems in the Government do not adequately account for such expenses as overhead costs, executive salaries, insurance and retirement benefits. With all expenses not accurately reflected, industry claims they are at an unfair disadvantage [Ref. 8:p. 50].

1. Federal Accounting Standards Advisory Board

In recognizing deficiencies in financial and other management information systems, the Chief Financial Officers (CFO) Act was established in 1990 to better reform decision-making and better measures results. As a result, the Federal Accounting Standards Advisory Board (FASAB) has developed a new set of accounting concepts and standards to underpin OMB's guidance [Ref. 64:p. 6]. These standards require that Federal agencies provide reliable and timely information on the full cost of Federal programs, their activities and outputs. Specifically identified in the standards, is the need for information to help guide decisions involving economic choices such as whether to do a project in-house or contract it out. These Federal accounting standards became effective in FY 1998 [Ref. 48:p. 4].

2. Federal Financial Management Improvement Act

In 1996, Congress passed the Federal Financial Management Improvement Act (FFMIA) requiring that agency financial management systems comply with, among other

things, Federal accounting standards and Federal financial management system requirements. The requirements were developed by the Joint Financial Management Improvement Program (JFMIP), a joint cooperative undertaking of OMB, GAO, Treasury and the Office of Personnel Management. This resulted in guidance to Federal agencies in defining their cost accounting software requirements [Ref. 63:p. 7].

3. Problems Remain

Deputy Defense Secretary, John Hamre says the accounting system should no longer be an issue. "We've had 2,000 competitions, and half the time the private sector wins, so I would argue that the playing field is level" [Ref. 8:p. 56]. However, GAO continues to identify significant problems with Government cost accounting systems as to their comprehensiveness and accuracy. Despite accounting changes made thus far, many feel that adequate cost accounting procedures are not yet in place and able to provide reliable cost information to support A-76 competitions [Ref. 63:p. 7].

D. THE OFFICE OF MANAGEMENT AND BUDGET CIRCULAR A-76

1. Origins of A-76

It was during the Eisenhower administration in the 1950's when Government performed commercial activities first began shifting towards the private sector. The Commercial-Industrial Studies Program looked for ways to increase outsourcing and developed procedures and guidelines in making outsourcing decisions [Ref. 12:p. 1]. The policy at the time stated that, "Federal agencies will not provide a function in-house that is obtainable from a private source unless Government performance of that function has

been justified in the national interest" [Ref. 12:p. 1]. Criteria used for justification of in-house performance was specified as essential for military readiness, lack of a suitable commercial source, or a determination that commercial performance would be more costly [Ref. 12:p. 1].

Although this policy was supported in principle by each succeeding administration, the first formal directive on the program was issued in 1966 by the Office of Management and Budget (OMB) [Ref. 68:p. 4]. Thus, in 1966 OMB Circular A-76 came into effect to provide policy guidance and implementation procedures for Government agencies to use in "make or buy" decisions for commercial activities. Later in 1979, a supplemental handbook to the circular was issued to address procedures for competitively determining whether commercial activities should be performed in-house, by another Federal agency via an Inter-Service Support Agreement (ISSA), or by a private contractor. This handbook has been updated in 1983 and in 1996 [Ref. 68:p. 4].

2. Conditions for Performance of Commercial Activities

The A-76 handbook sets forth principles and procedures for managing the Government 's acquisition of reoccurring commercial support activities. Under the 1996 revision of the A-76 handbook, nine conditions are given which permit the Government to perform commercial activities [Ref. 36:p. 7]:

- a. National Defense / Intelligence Security: The Director of the CIA must approve national security justifications.
- b. Patient Care: The Government may perform the commercial activity of health care.

- c. Core Capability: A core capability may be retained for certain activities (This includes depot-level maintenance. See Chapter II, E2 for more details).
- d. Research and Development: R&D are exempt although many related support activities are not.
- e. No Satisfactory Commercial Source Available: Agencies must certify that the solicitation did not restrict or otherwise limit competition.
- f. Functions With 10 or Fewer Full Time Employees (FTE): May be converted if Contracting Officer determines that reasonable prices cannot otherwise be obtained.
- g. Meet Performance Standard: Agencies may demonstrate that the activity meets or exceeds generally recognized industry cost and performance standards after all adjustments as required by A-76 supplement.
- h. Lower Cost: Results of a cost comparison demonstrate that in-house performance is less costly.
- i. Temporary Authorization: Temporary emergency performance may be warranted not to exceed the next full contract option year.

In addition, the 1996 A-76 handbook provides nine conditions which permit contractor performance of commercial activities [Ref. 36:p. 7]:

- a. Contracted Activities: Should be obtained by contract, unless a cost comparison demonstrates that in-house or Inter Service Support Agreement (ISSA) performance is more cost effective.

- b. New Requirement: Should be obtained by contract, unless contact quality or price is unreasonable. A cost comparison is required to convert from Government or ISSA.
- c. Severable Expansion: A severable expansion of a current in-house or contracted activity should be obtained by contract unless quality or price is unreasonable. Cost comparison as in b. above is also required.
- d. ISSAs: Contract activities may be performed by in-house or contracted resources or by Inter-Service Support Agreement (ISSA).
- e. Activities with 10 or Fewer FTE: May be converted to or from in-house to contract or ISSA without a cost comparison.
- f. Activities with 11 or More FTE: May be converted to contract or ISSA without cost comparison, if fair and reasonable contract prices can be obtained and all Federal employees on permanent appointments can be reassigned to other comparable Federal jobs.
- g. Activities Performed by Military: Activities performed by military may be converted to contract without cost comparison if fair and reasonable prices can be obtained.
- h. Preferential Procurement Programs: Contract performance may be granted without cost comparison if the contract is awarded to a preferential procurement program at fair market price. At the agency's discretion, a cost comparison may be conducted.

- i. Lower Cost: Conversion to contract is required if a cost comparison indicates that contract performance is the lower cost alternative.

3. Overview of A-76 Procedures

Until recently, most A-76 studies all focused on the lowest price with only a few using best value standards. This section provides the overall procedures for a Low Price Technically Acceptable (LPTA) competition. Additional requirements caused by a best value selection are discussed under Section E3 below [Ref. 63:p. 24].

The first step requires the Government to develop a detailed performance work statement (PWS) covering all functions that it performs which is being considered for outsourcing [Ref. 36:p. 10]. This performance work statement is incorporated into the Request for Proposal (RFP) when industry offers are solicited.

Usually prior to the solicitation process or during it, the Government conducts a study to determine the most efficient way to conduct the same service with in-house staff. [Ref. 36:p. 11]. This is known as the Most Efficient Organization (MEO) and is not necessarily the current structure but the most efficient structure that could reasonably perform the functions. Based on this MEO, the Government develops a cost estimate and submits a cost estimate to the selecting authority [Ref. 36:p. 11].

The selecting authority concurrently opens the Government cost estimate along with the contractors' proposals or bids. Once the lowest contractor's bid is determined, it is compared to the Government's in-house cost after some adjustments (see Section D4 below). The adjusted contractor's bid is then compared to the Government's in-house estimate. If the contractor can beat the in-house estimate by at least 10%, the contractor

is awarded the contract. The overall process from start to finish is very lengthy and can take two to four years or often longer to complete [Ref. 63:p. 24].

4. Adjustments for Cost of Contractor Performance

There are several adjustments made to the contractor's bid / proposal in an effort to ensure that the Government is comparing "apples to apples" to determine any additional costs or benefits to the taxpayers by outsourcing. Listed below is a summary of those recurring adjustments in Circular A-76:

- a. Federal Income Tax: Decreases the contractor's bid to reflect income tax the Government will receive from contractor operation [Ref. 36:p. 27]
- b. Contract Administration: Increases the contractor's bid by adding estimated costs to administer the contract based on the company's number of employees.
- c. Additional Costs: May increase or decrease the contractor's bid for transportation, purchased services, or other recurring costs caused by outsourcing [Ref. 36:p. 26].

In addition to recurring costs are one-time conversion costs. Listed below is a summary of those one-time adjustments used in the A-76 process [Ref. 36:p. 26]:

- a. Material Related Costs: May increase or decrease the contractor's bid for certain items of Government material or equipment that would otherwise have been used by the in-house MEO and would become excess and available for transfer to another in-house activity or contractor.

- b. Labor Related Costs: May increase or decrease the contractor's bid for such costs as health benefits, severance pay, retraining expenses, homeowner assistance, relocation and initial contractor security clearance requirements.
- c. Other Costs: Any other costs require agencies to mitigate these costs and justify why such costs are necessary.

E. RECENT REVISIONS TO CIRCULAR A-76

The A-76 process has historically been controversial for proponents and opponents of increased outsourcing. The length of time, determination of direct and indirect costs, and the basis for Government estimates, are all topics of controversy [Ref. 63: p. 2]. As a result of many of these controversies, OMB revised its A-76 supplemental handbook in March 1996 primarily changing the way Government costs estimates are developed. In their update, OMB had discussions with Government and industry representatives as a basis for its changes [Ref. 63:p. 5]. This resulted in adding or changing several standard cost factors and establishing a standard overhead rate of 12 percent of direct labor costs. It established higher overhead rates for military personnel and established procedures for best value contracting [Ref. 63:p. 3].

1. Twelve Percent Overhead Rate

Lacking sound empirical data on which to base an overhead rate, OMB's discussions with Government and industry yielded estimates from 0 to 30 percent of direct labor [Ref. 63:p. 5]. The standard rate was finally set at 12% of direct labor costs. OMB left some flexibility for Government organizations to use a different rate, however

in doing, so agencies must explain their methodology for developing the rate in the Federal Register and subject it to public review and comment [Ref. 63:p. 5].

Prior to establishment of the 12% overhead rate, winners of A-76 competitions were generally divided equally between Government and industry. GAO asked the Air Force to conduct a survey of 33 such competitions in which the Government estimate won to see the effect of adding the overhead rate to the Government estimate. In 12 of the 33 competitions, if the 12% had been added, the contractor would have won the competition [Ref. 63:p. 8].

2. Military Personnel Overhead

OMB has pushed for a standard military overhead rate citing higher costs for military personnel in its 1996 A-76 supplement requiring DoD to cost military personnel at their respective pay rates and develop and apply a separate rate for them, other than the 12% rate [Ref. 63:p. 9]. However, DoD has balked at this claiming that by definition commercial activities under the A-76 program should not include any military-essential functions. Therefore, any military occupying such positions are considered to be there on a temporary basis, thus for the purpose of the MEO portion of the A-76 study, the positions are assumed to be staffed by civilians [Ref. 63:p. 3].

3. Best Value Contracting

A major change in the A-76 supplement was the addition of procedures for best value source selection for competitions involving higher levels of risk and complexity, such as depot-level maintenance. This allows for tradeoffs for technical as well as non-technical factors, such as past performance [Ref. 63:p.10]. The Federal Acquisition

Regulation (FAR) currently requires that contracts over \$500,000 must include past performance as an evaluation factor. This requirement extends to contracts over \$100,000 on 1 January 1999 [Ref. 21:p. 16,929].

Under a best value A-76 study, the same procedures mentioned in Section C3 above are followed except that the Government in-house activity must provide a detailed proposal in addition to its cost estimate to allow for a direct best value comparison with the contractor [Ref. 63:p. 10]. This not only provides the Government with the opportunity to demonstrate value added for continued in-house service but ensures that both the Government and the contractor are basing their estimates on the same statement of work (SOW). If the in-house proposal does not include the same level of performance, the Government is required to make the necessary changes before comparison is made [Ref. 63:p. 10].

Another difference between best value and LPTA selections is that under the cost portion of the source selection, the costs are compared equally and the in-house activity does not get the 10% advantage it does in a LPTA selection. However, this does allow the in-house activity to demonstrate its “other than cost” benefits [Ref. 63:p. 10].

F. LIMITATIONS OF CIRCULAR A-76

1. Defense Science Board’s Comments

As part of the Defense Science Board’s (DSB) analysis of outsourcing, it looked at the A-76 process with the most recent changes made in 1996. The DSB claimed that the entire A-76 process contradicted Federal policy to rely on the private sector for

commercial goods and services. The DSB claimed that the A-76 process establishes "highly formalized, legalistic, and time-consuming procedures for conducting public / private competitions" [Ref. 70:p. 41].

The DSB criticized the lengthy time required for the studies citing that the Services indicated that the process takes at least 24 months for simple, narrow functions requiring only the submission of sealed bids and up to 48 months and beyond for more complex comparisons [Ref. 33:p. 19].

The DSB also criticized the Government's lack of accounting systems and internal controls, its MEO method that does not show the actual current configuration and the 10% savings requirement. It recommended that all support activities that are commercial in nature should be provided by private vendors [Ref. 70:p. 3-8].

2. Outsourcing Opposition Comments

Opponents of outsourcing counter that a detailed examination is necessary, particularly for such capital intensive activities as depot-level maintenance, which cannot be easily returned to in-house performance should outsourcing fail [Ref. 58:p. 6].

With regard to the use of MEO in a comparison, opponents contend that it is essential to compare the most efficient organization to that of the contractor or the process is not truly comparing the best opportunities. Besides, the entire effort of going through the A-76 process enables Government to become more efficient and the end result provides the best alternative for DoD and the taxpayer [Ref. 60:p.11].

Many opponents also contend that the 10% savings differential is warranted for LPTA selections and should also be applied to best value as well. It would be foolish to

make a massive disruption of employees' lives unless there is reasonable savings [Ref. 8:p. 50].

G. CHAPTER SUMMARY

The Government's make or buy decision is governed by OMB Circular A-76. Due to differences in the strategic objectives of Government versus industry, it is difficult to make an equal comparison between the Government in-house estimate and the contractor's proposal. Circular A-76 was created to provide the procedures necessary to make adjustments to equalize the two proposals prior to the final source selection decision. However, controversy has always existed as to the fairness of the process.

Improvements have been made in an attempt to reduce some inconsistencies in the process. Recent efforts to implement changes to improve accounting procedures, adjust for indirect cost rates and provide more details for best value contracting are clear efforts to "level the playing field". But is it truly leveled, and is a level playing field essential to ensure that the Government gets the optimum benefit and best value for its depot-level maintenance?

The next chapter will look at opinions and arguments from both the pro-outsourcing and pro-depot caucuses. Each side believing that their approach provides for the optimum benefit and best overall value for the Government.

IV. POINT- COUNTERPOINT: PUBLIC DEPOTS VERSUS PRIVATE INDUSTRY

A. INTRODUCTION

There are strong opinions and positions as to who should provide depot-level maintenance. This chapter will present the primary arguments on both sides of the issue. The following two sections will present the positions of the pro-outsourcing and pro-depot caucuses and allow for counterpart opinion on the same topic. The first of these (Section B) presents the primary positions from the pro-outsourcing caucus and allows for counter-point comments from the pro-depot supporters. The second, (Section C) presents the primary positions from the pro-depot caucus and like-wise, allows for a counter-point by outsourcing proponents.

The pro-outsourcing position focuses in the following areas: cost savings, competition, small business and subcontracting, technology, core competencies, and the national industrial base. The pro-depot position addresses these areas: defense industrial base and national security, surge capacity, monopolies and loyalties, cost of outsourcing failure, specialized and low volume services, and job loss and unemployment.

B. PRO-OUTSOURCING POSITIONS

1. Cost Savings

Pro-Outsourcing: Despite DoD's efforts to cut costs, industry executives claim that they can do the work for much less [Ref. 13:p. 5]. Industry claims that as in basic

economics, competition and market forces should bring costs down as more companies compete for maintenance contracts. They cite several studies to support their position.

First, the report to the Commission on Roles and Missions (CORM) published in 1995 revealed that over a quarter of a million Federal employees engaged in commercial-type activities that could be performed by the private sector estimating that 20% could be saved by turning over such functions to industry [Ref. 67:p. ES1]. The CORM study specifically recommends that DoD outsource all material management functions to include depot maintenance. The study goes on to recommend that such heavily capitalized Government assets like depots and arsenals be privatized in place [Ref. 41:p. 43].

Second, the Defense Science Board (DSB) report on outsourcing and privatization, citing up to 30% in cost savings, recommends that all DoD support functions which are not inherently Governmental be outsourced unless no adequate private-sector capability exists or can be expected to be established [Ref. 70:p. 2].

In supporting their claims, proponents cite savings that have been achieved thus far. In reviewing more than 1,000 cases of outsourcing, the Center for Naval Analysis (CNA) found that 71% of outsourcing cases produced savings of 30% or more [Ref. 24:p. 10]. The Congressional Budget Office (CBO) confirms a similar range of savings citing 20% to 40% thus far achieved through outsourcing and privatization [Ref. 24:p.10].

Pro-Depot: Opponents argue that GAO took a detailed look at the CNA, CBO, and CORM studies, stating that comparisons were made with commercial activities with a clear parallel to industry [Ref. 60:p. 13]. Savings projections did not use depot-level

maintenance activities in these studies. The commercial activities studied require low-skill and minimal capital such as lawn maintenance, janitorial services, travel and recreation services, and base maintenance contracts [Ref. 60:p. 13]. Such services require minimal capital investment and in most cases, low-skilled personnel when compared to depot-level maintenance. Conversely, depot maintenance of combat systems requires a massive capital outlay, requires highly skilled technicians and has a very slim parallel to the commercial industry. This provides a much smaller opportunity for savings [Ref. 62:p. 4].

In direct contradiction to industry's claim, a GAO study of 12 DoD buying activities focused solely on depot maintenance, revealed that 67% of the competitions were won by the public depots. The differences were astonishing in that average winning bids from the public sector were 40% lower than that of the private sector! [Ref. 60:p. 2].

Another point mentioned by opponents is the cost of components. A GAO review reveals that even though the private sector is usually more competitive for certain common items, the Government usually has the better price for military unique items. Since military unique items are required more often, the result is that the Government has overall lower prices for components [Ref. 60:p.17]. In GAO's detailed look at overall component cost of 414 major end items repaired by both public and private sectors, the Government had the lower price 62% of the time [Ref. 60:p.17].

Opponents also cite cost escalation that often negates any upfront savings that might be achieved by outsourcing. They claim that studies show that industry costs escalate much faster than for the same function performed in-house [Ref. 37:p. 72]. A

Navy study of helicopter maintenance showed that in-house cost escalation ranged from 2.27% to 2.97% per year while contractor escalation ranged from 4.52 to 6.19%, a whopping 88% to 141% higher! [Ref. 37:p. 29].

The privatization of the Aerospace Guidance Meteorology (AGM) Center in Newark, Ohio proved the same. Once privatized to Boeing, costs rapidly escalated and in only 5 years, taxpayers were paying 31% more than they would have had the facility remained under Government operation [Ref. 62:p.10].

2. Increased Competition

Pro-Outsourcing: Industry claims that as in basic economics, competition and market forces should bring costs down as more companies compete for maintenance contracts. When the Government provides the service it does so in a monopolistic environment, which inflates prices and offers no incentive for efficiency. By opening up more services to the private markets it will create more interest from industry. Industry then moves to meet this demand and increases the supply of contractors willing to provide depot-level maintenance [Ref. 53:p. 36]. For example, in the area of aircraft engine maintenance, there are at least 17 military engines with commercial counterparts [Ref. 66:p. 4]. A GAO study determined that there were 18 contractors interested in performing maintenance on these engines [Ref. 66:p. 4].

Industry concedes that in many cases depot-level maintenance is sole-source. However, with top involvement, competition can be increased. When considering outsourcing of aircraft maintenance at Sacramento Air Logistics Center, the White House Deputy Chief of Staff John Podesta asked Deputy Defense Secretary John Hamre to

encourage Lockheed Martin to submit a proposal to compete with Boeing. This direct involvement by our country's leadership can increase depot-level maintenance competition [Ref. 77:p. 7].

Pro-Depot: Opponents are quick to point out the statistics on current depot maintenance outsourcing [Ref. 58:p. 44]. Due to the high capital equipment expenses related to depot maintenance, very few firms are interested. Past experience confirms that outsourcing of depot maintenance is primarily sole-source. A 1996 study by GAO revealed that of the contracts awarded for depot-type maintenance, 76% were awarded under sole-source, 4% had limited competition and only 20% had full and open competition [Ref. 58:p. 44]. Of the \$4.3 billion awarded under 240 contracts to 71 contractors, 76% of the total went to 13 contractors and 30% were awarded to just three [Ref. 60:p.16]. By 1998, with the increase of outsourcing limits to 50%, competition has actually decreased with the percentage awarded under sole-source increasing to 91% of the total [Ref. 58:p. 2].

Critics further note that, the DSB study, discussed earlier, is highly contradictory since its own recommendations support outsourcing of depot maintenance and at the same time recommends that outsourcing be applied where *adequate* private sector capability exists [Ref. 70:p. 2]. With competition in less than 10% of current cases, adequate outside capability is not apparent [Ref. 58:p. 2].

3. Small Business and Subcontracting

Pro-Outsourcing: Proponents point out that even with 91% of the prime contracts sole-source, there were 1100 subcontracts for depot maintenance [Ref. 58:p. 2].

Understandably, small business has little chance in winning a major depot maintenance contract as a prime contractor. However, of importance are the subcontracting opportunities that account for as much as 50% of contracted depot maintenance dollars. This represents a significant amount of work going to small business. With increased opportunities for outsourcing comes increased opportunities for small business to participate, providing repair parts, repair to certain end item components, packaging and crating, and administrative functions associated with the process [Ref. 58:p. 2].

Pro-Depot: Opponents respond that with increased subcontracting on such a complex function as depot-level maintenance comes increased performance and cost risk [Ref. 7:p. 38]. This has proven to be a problem for many large companies such as, Textronics, GM, DuPont and others [Ref. 58:p. 2]. A survey by Information Week Magazine found that half of those companies surveyed reported problems caused directly by subcontractors. Of the problems cited: 67% were categorized as service related, followed by 30% for costs, 17% for computer viruses, and 10% for security [Ref. 7:p. 38].

4. Benefits of Technology

Pro-Outsourcing: A major benefit to outsourcing proponents claim is their increased access to technology [Ref. 57:p. 6]. During the years of the Cold War, the defense industry was credited for a significant number of technological breakthroughs and the commercial industry learned from Defense. This pendulum has swung in the other direction, with dwindling military requirements countered by a booming business

environment. The commercial industry is now in the forefront of technological innovation [Ref. 57:p. 45].

This gives industry advantages, both in process and product technology. Today's highly complex military equipment is maintained unlike that of previous generations. It is computer hardware and software intensive requiring the most modern testing equipment and expert technicians.

Furthermore, in most cases, the contractor is the original equipment manufacturer. (OEM). In such cases, it already has the equipment, expertise, and capability to conduct depot-level maintenance of the highly technological equipment it manufactures [Ref. 73].

But of greater significance than the ability to maintain the technological advantage in equipment, is the ability to retain the expertise to operate and maintain it. Industry can offer the salaries to attract the programmers, developers, and hardware experts required to maintain such systems which is difficult for the Government with lower salaries [Ref. 38:p. 28].

Pro-Depot: Opponents comment that some of their depots and arsenals have modern manufacturing, repair and testing equipment to include laser technology and modern robotics [Ref. 44:p. 5]. Opponents point out that it is DoD that has kept the Government depots from being on the same technological edge as industry by not being willing to commit the dollars needed for infrastructure and modernization. Nor is DoD willing to adequately pay those skilled software technicians when the primary effort is on reducing civilian personnel strength. Industry can modernize because it has the dollars to

do so. If the Government depot system is given the same priority and funding, it would be every bit as modern as industry [Ref. 50:p. 19].

5. Core Competencies

Pro-Outsourcing: Industry contends that DoD should delete its policy on core requirements for depot-level maintenance and focus on warfighting. By both DoD and industry performing the same function, it drains the labor pool and results in excess capacity [Ref. 11:p. 19]. Why should both do the same jobs that the private sector does equally well, or even better for less money? They ask why not shift such work to commercial firms so that DoD can truly focus on its core of warfighting? [Ref. 70:p. 9].

Focusing on core competency is nothing new to industry. As industry strives to compete, it must constantly look for ways to remain efficient. This is a step beyond the “make or buy” decision and is common place in industry. General Motors recently announced it would spin off its Delco electronics division into a separate company in an effort to become less vertically integrated and, after a series of strikes at those plants, caused a chain effect at other GM assembly lines. This was a radical idea since Delco was previously considered to be core for GM [Ref. 1:p. 148]. Senior management at GM believe that by separating Delco, GM will have greater flexibility in acquiring such components, reducing costs and improving efficiency [Ref. 1:p. 148].

Pro-Depot: Opponents agree that DoD should focus on its core competency. However, just what is included in “core” is the contentious issue. The critical nature of depot-level maintenance necessitates that it too be considered a core competency. DoD states that; “Core exists to minimize operational risks and to guarantee required readiness

for these weapons systems". They contend that the only way to truly "guarantee" the required level of readiness is to have the services performed at Government depots [Ref. 70:p. 8].

6. Preserve the National Industrial Base

Pro-Outsourcing: Jacques Gansler, Under Secretary of Defense (Acquisition and Technology) states that "We now must think of the defense-industrial base as the U.S. industrial base. We can no longer consider them separate" [Ref. 74:p. 1]. The drastic decline in the number of defense contracts since the end of the Cold War resulted in the vertical integration of defense firms. There are far fewer defense contractors remaining to compete over a Defense budget that is 69% smaller than that of 1985 [Ref. 74:p. 1].

With fewer Defense dollars, it makes it increasingly difficult to remain profitable. Elimination or reduction of outsourcing restrictions or better yet, privatizing the remaining depots and arsenals, would increase the dollars available for these companies to reduce the effect of "feast or famine" cycles in defense spending and allow for a more predictable and adequate funding level. This helps to ensure their survival which in turn preserves competition for procurement of new weapon systems [Ref. 75:p. 19].

Pro-Depot: Outsourcing opponents prefer to retain the defense industry concept. As previously stated, the major differences in the purpose of industry and that of Government should be the key factor. With a defense industrial base centered on Government depots and arsenals, DoD is completely assured that core depot maintenance will be accomplished in peace or war. Even if it were more efficient, a national industrial

base cannot make the same guarantee of performance that a defense industry utilizing public depots can assure [Ref. 50:p. 19].

C. PRO-DEPOT POSITIONS

1. The Defense Industrial Base and National Security

Pro-Depot: One of the primary arguments against increased outsourcing is the risk associated with such a critical function. Industry is motivated by profits. Should DoD's priority be the same? National defense is and will unquestionably remain DoD's priority. What happens in a case of national emergency or war? If a depot maintenance contractor cannot perform during such time of national crisis we may not have time to find another contractor. Also, since 91% of privatized depot-level maintenance has no competition, DoD has few options [Ref. 58:p. 2].

Opponents cite history to prove their case. Since the end of the Revolutionary War, the United States has repeated the mistake of being unprepared. The War of 1812, the Civil War, World Wars I and II, and the Korean Conflict are key examples where the United States let down our guard and paid for it in the lives of many men on the battlefield. “One day may come when it is not available for rapid mobilization in wartime” referring to depot maintenance, as stated by Lauren Thompson, Director of Defense Programs at the Alexis de Toqueville Institute, a Washington research organization [Ref. 62:p. 1].

Government arsenals and depots were created specifically as a “lesson learned” from these experiences. These facilities are available now, in operation and producing

the depot maintenance required to keep our equipment in a high state of readiness. A contractor, any contractor regardless how proven his record may be, is a performance risk when compared to a functioning, in place arsenal. The Government arsenal is virtually 100% assured of being able to perform the mission. A contractor would be able to perform but not at 100%. Given the lethality and speed of warfare today, can we afford to hope that the contractor will perform during national emergency? [Ref. 50:p. 19]

Pro-Outsourcing: Proponents counter that it was industry that mobilized to meet the threats of those wars and their overall record is stellar [Ref. 2:p. A-1]. They also claim that now more than ever before, industry is even better able to do the job since only the strongest defense contractors remain. Those able to tackle depot maintenance are large contractors who have proven themselves [Ref. 2:p. A-1].

As previously discussed in Section B7, DoD should refocus upon a national industrial base vice a defense industrial base run by DoD. Today's national security planners can count on the continuing presence of a financially and technically strong national industrial base which is more than capable of providing not only the modern weapon systems for our nation's defense but sustain them as well in peace or war [Ref. 75:p. 19].

2. Response Time to Workload Surges

Pro-Depot: Even if the contractor is able to continue operations during a national emergency, how responsive will he be to required workload surges? Can he respond as quickly as the Government depots? Will his labor unions protest and go on strike? [Ref. 49:p. 1] None of these are issues with Government depots. The idle capacity becomes

of immediate use to allow for surges [Ref. 39:p. 45] and Government employees cannot strike [Ref. 49:p. 1]. As stated by Congressman Jim Leach, R-Iowa “Arsenals are always available in an emergency and can respond to any requirement our troops might have” [Ref. 35:p. 3].

Opponents cite an example of industry failure during the Gulf War that proves their case. Shortages existed in sustaining ammunition for the ground forces during the war. Theater and CONUS stocks of smart munitions were completely exhausted and industry could not regear their production lines fast enough to avoid a shortfall. It was the depot system that came to the rescue by reactivating several assembly lines of mothballed Army ammunition plants to produce Tube-launched Optically guided Wire (TOW) and other anti-tank munitions. Had the Gulf War lasted much longer, the U.S. risked fighting much of the war with “dumb” munitions. Even of greater concern, had the war become a protracted engagement, all munitions would have been at risk [Ref. 28].

Pro-Outsourcing: Industry again responds that their overall record is stellar and that many problems in the past were from companies which are now out of business or have been consumed by the larger more efficient defense contractors [Ref. 2:p. A-1].

They further point out that today’s defense contractors have a dual-use manufacturing capability for many of their products. With major technological advances, it allows them to more quickly convert from commercial production to military production when requirements dictate. This enables industry to react to meet surge requirements faster than ever before without retaining costly excess capacity [Ref. 30:p. 11].

Also using the Gulf War as an example, proponents cite that the vast majority of sustainment support by contractors worked well. Never before had so many contractors been so directly involved in supporting the war effort. Contractors deployed on the heels of combat forces and were quickly able to provide support performing several depot-level type functions in the rear within the theater. Industry's service in the Gulf War was unquestionably a key factor for its success [Ref. 73].

3. Monopolies and Loyalties

Pro-Depot: Opponents cite that when the Government loses a competition for such a major function as depot-level maintenance, the Government workforce is retired, dismissed or reassigned and all assets the Government possessed to accomplish the function are privatized, transferred or sold. Should this happen, the contractor moves to the driver's seat in controlling the contract. Since depot-level maintenance is primarily sole-source, a monopolistic situation develops since the Government is in no position to return to performing the function [Ref. 5:p. 19].

Pro-Outsourcing: Proponents state that the effects of sole-source do not have the same affect as that of a true monopoly. Defense contractors are largely dependent upon the Government, for their goods and services which creates a monopsonistic relationship. It is true that some companies such as Boeing, are less dependent than others, but the monopsonistic relationship for defense-related goods and services still applies. The Government is still the dominant buyer [Ref. 75p. 19].

Proponents point out that the benefit of such a situation is in most cases the sole-source provider is usually the original manufacturer. As such, the company is the clear

expert on the entire system and is much better able to provide the maintenance. As such they have more than a vested interest in staying up to date on the best maintenance procedures [Ref. 73].

4. Cost of Failure

Pro-Depot: At Fort Gordon, Georgia, the total failure of a contracted base operations (BASOPS) function required the Government activity to be totally reinstated. This was costly for the Government in time, effort and money [Ref. 28]. Proponents would now want to consider the same scenario with a depot. How costly would this same scenario be to reinstate a depot that has been closed, the personnel released and equipment and real estate sold off? This is a very real possibility given that 91% of contracted depot-level maintenance is sole-source [Ref. 58:p. 6].

As mentioned in Chapter II, the current plans are for 65% of new weapon systems to use the original manufacturer for 100% of all depot-level maintenance [Ref. 62:p. 7] and 42% of new systems not to be procured with technical data packages [Ref. 62:p.16]. If the original manufacturer goes bankrupt in a case where the Government depot never provided the maintenance in the first place, the problem is magnified significantly essentially deadlining the entire weapon system line [Ref. 28].

Pro-Outsourcing: Industry counters with the record of its major defense contractors. Those that remain are the most efficient and least likely to fail [Ref. 73]. Should one begin to falter there are several options. First, the company could work with the Government to possibly make changes in the contract using progress payments, advance payments, decreasing contractual requirements or otherwise revising the contract

to more favorable terms for the contractor [Ref. 21: Part 32]. Second, the company could look for a merger partner or another large company to buy them out. Then the Government maintenance contract could continue under the new company [Ref. 21: Part 42]. Third, the Government could use the mentor-protégé concept where the sole-source mentors another company to be able to provide the same service. Fourth, senior DoD leadership or Congress could get personally involved to encourage competition as was done recently in considering outsourcing of aircraft maintenance at the Sacramento Air Logistics Center. White House Deputy Chief of Staff John Podesta became personally involved and asked Deputy Defense Secretary John Hamre to encourage Lockheed Martin to submit a proposal to compete with Boeing [Ref. 77:p. 7]. Finally, if all else fails the Government could certainly purchase the technical data package for the system and components to allow it to provide the maintenance. In addition, it would also have easy access to the many soon-to-be unemployed contracted employees to provide the expertise [Ref. 14].

5. Specialized and Low Volume Items

Pro-Depot: Some of DoD's arsenals produce parts and components that industry simply cannot produce as economically. For example, components for Soviet-style equipment used for training are produced at Rock Island Arsenal in Illinois [Ref. 44:p. 5]. Previous attempts contracting out such specialized low volume production items have proven extremely costly [Ref. 44:p. 5]. Industry has demonstrated in the past that they are not interested in extremely small workloads. Those companies that are interested must charge accordingly to produce these limited quantity items. How can we expect industry

to purchase the machinery, retool it and produce one or two components and charge a competitive price? In these cases, DoD comes out ahead with the equipment, people and capacity to do the work [Ref. 50:p. 19].

Pro-Outsourcing: Admittedly industry cannot continuously charge low prices for items produced one or two at a time when industry must purchase the equipment, dies, jigs, etc., necessary for limited production items. Dual-use manufacturing does offer some advantages by allowing product lines to be shifted to other work in a much easier fashion [Ref. 30: p.11].

Proponents state that the best option is privatization or teaming. In both options, the contractor has access to existing Government equipment that produces these unique items. These options allow for the benefits of both worlds, combining the Government equipment and on-hand expertise with industry's efficiency and technological know-how [Ref. 11:p. 11].

6. Job Loss and Unemployment

Pro-Depot: DoD's depot system employs about 76,000 civilian personnel from laborers to highly trained technicians, engineers and top-level management [Ref. 63:p .9]. This number has already been reduced by 49% and 71,000 jobs have been lost since 1990. Opponents make a multitude of claims with regard to the detrimental affect of further job losses and their affect on the economy which is not reflected in any public / private comparison [Ref. 63:p. 9].

First, a Navy study shows that only 38% of displaced Government employees found other Federal jobs and only 3% were hired by the new contractor [Ref. 51: p.22].

This creates significant costs not just to DoD, but to the Government as a whole with unemployment costs, retirement, and other separation based costs [Ref. 51:p. 22].

Second, the very benefit of flexibility of the private workforce is also a detriment and creates “underemployment” since many of the employees are part-time or hired during required workload surges then laid-off. For many, when their task is completed they return to the unemployment lines already packed with Government employees [Ref. 5:p. 20].

Third, opponents contend that this policy encourages illegal immigration. The flexibility given to the contractor regarding his workforce incentivizes low pay and temporary employment for much of the workforce. The low pay often will not attract those released Government employees receiving higher unemployment compensation. The illegal immigrant is then attracted to take the lower paying jobs [Ref. 5:p. 20].

Finally, from the human standpoint, opponents argue that we have done enough. With a loss of 71,000 employees since 1990, DoD has endured repeated drawdowns and those individuals remaining are among the best of DoD’s employees. They work harder and are more efficient than ever before. They have made significant contributions in supporting our Armed Forces and deserve some job security [Ref. 63: p.9].

Pro-Outsourcing: Proponents counter that further loss of jobs is part of downsizing. Part of the problem with the Government’s method of downsizing is that the younger, more energetic and innovative workers are the first to go, leaving the more senior to continue to operate the depots [Ref. 39:p. 45]. This results in stagnation of the work ethic. Though more experienced, they are less familiar with new business practices,

less likely to use technology to its fullest extent and less likely to make the necessary changes needed to ensure the survival of the depot system [Ref. 39:p. 45].

At any rate, proponents claim that most of the dislocation of workers should only be temporary [Ref. 51:p. 22]. Some will transfer to other Government locations and take other Government jobs. Since these former Government employees have a “right of first refusal,” many will be offered jobs with the new contractor. This number should be greater than the 3% cited by CNA since that study encompassed very small activities with an average displacement of only 7 employees [Ref. 51:p. 22]. The expertise of many of these employees will be sought by the contractor, particularly where the Government effort was privatized. Those eligible to retire will do so and those close to retirement are often offered “early” outs under various programs [Ref. 39:p. 45].

D. CHAPTER SUMMARY

There are strong arguments both for and against additional outsourcing of depot-level maintenance. There are examples of both contract successes and failure. Proponents cite the benefits of outsourcing depot-level maintenance; cost savings, increased competition, advanced technology, allowing DoD to focus on its core competency and preserving of our national industrial base. Opponents praise the benefits of the public depots with their advantages in the areas of national security, surge capacity, loyalty, specialized and low volume work, and criticize the negative effects of outsourcing on jobs and cost of industry failure.

The bottom line issue seems to be **cost vs. risk**. Those issues in support of increased outsourcing are largely directly or indirectly related to cost savings. Opposition issues are all concerned about the risks associated with outsourcing. Just how much risk should DoD take? In order to make a best value decision we must consider which factors are important when making a source determination of who should provide depot-level maintenance for a particular activity.

The next chapter will address the results of a questionnaire presented to Government military and civilian personnel as well as industry representatives to compare and contrast their views to source determination for depot-level maintenance.

V. INTERVIEW / SURVEY RESULTS

A. INTRODUCTION

A twelve question survey was distributed to over 150 Government and industry personnel. Of those, only two were returned. As a result, the number of questions was reduced to five and key Government and industry personnel were interviewed telephonically and via e-mail (revised questionnaire at Appendix A). The end result was fourteen completed either telephonically or via the e-mail survey, however, of these, four Government respondents were completely unfamiliar with the issues and the results were discarded. Of the remaining ten, five were Government and five were industry. With such a small sample size statistical sampling would be irrelevant, however, the nature of the questionnaire allowed for significant feedback from those who participated giving detailed insight and new opinions which were incorporated into the preceding chapters.

B. INTERVIEW RESPONSES AND ANALYSIS

1. Respondent Background and Information

As mentioned above, only those individuals who were familiar with the depot maintenance issues were included in this analysis. The ten respondents were evenly split between Government and industry. On the Government side, three were military and two were civilian with experience ranging from 17 to 31 years in Government service for an average of 26 years. On the industry side, four of the five had previous military experience with either the Air Force or Navy with an average of 23 years in the Service.

experience with either the Air Force or Navy with an average of 23 years in the Service. They had an average of 16 years with the defense industry. All individuals were in senior leadership positions whether Government or industry.

2. Discussion Questions and Analysis

a. Question 1: Should the national industrial base or defense industrial base be considered in making source of determination decisions for depot-level maintenance? If so, how should it be considered and why or why not?

In all cases, both Government and industry felt that the industrial base as a whole should be considered. Government was more likely to mention that both the national and defense bases should be sustained but with priority upon the defense base. Industry largely felt that sustaining both were important, but stressed the national industrial base as the priority in “holding the key to affordability”.

A common theme from the Government side was that the risk of turning over all work to industry was much too great and created an unacceptable risk to national security. The importance of maintaining capability was stressed by four of five Government respondents. Four out of five in industry also agreed that both national and defense base are important but stressed the benefits that industry can provide in the areas of technology, reliability and affordability.

Some of the comments from Government respondents:

- If we do not consider the national industrial base we do not know if we are getting a good baseline for the ways our depots operate [Ref. 3].
- Both elements are necessary. The contractor base should be used like an insurance policy. The in-house base must never be drawn to zero for then the contractors will be able to charge whatever price they like. Oftentimes,

particularly with limited competition, contractors cannot or will not for a reasonable price, come through with the goods [Ref. 45].

- The depots must be workloaded to an efficient and effective level to retain and exercise skilled workers, keep and maintain excellent and modern facilities and equipment. Left over depot level work could be passed to the contractor [Ref. 45].
- The industrial base is motivated mainly by profit without some of the more noble factors of patriotism, duty to country and close alignment with the war fighter [Ref. 46].

Some of the comments from industry respondents:

- The incentive is on the industrial side to maintain technology for hardware and test equipment. Most Public depots buy their test equipment from the OEM and have difficulty keeping pace with changes and technology enhancements. The OEM is normally heavily involved in this and has vested interest in long term maintenance support [Ref. 10].
- Both have their value added, but the private sector industrial base holds the keys to affordability [Ref. 19].
- The national industrial base should be considered first, it should be the preferred choice for depot work. Government should not compete with industry for this work [Ref. 20].
- The Government should maintain some non-hardware specific core "capabilities". The priority is to get best value wherever... with Government or industry. When with industry, the Government needs transition planning necessary to cover an industry failure... recover via another contractor or go organic. This is no different than what the large aerospace companies do for themselves [Ref. 25].

b. Question 2: What factors should be considered in making source of determination decisions for depot-level maintenance?

There were several factors mentioned as important. Table 5-1 depicts a summary of all factors mentioned by respondents listed in overall importance. In looking at the

Table 5-1
Factors for Source Determination
(Results from Interviews/Surveys)

<u>Factor</u>	<u>Government</u>	<u>Industry</u>	<u>Total</u>
meet requirements / maintain schedule	4	2	6
past performance	3	3	6
responsiveness / readiness	2	3	5
cost	2	3	5
best value	2	3	5
excess capacity / workloading depots	4	0	4
core determination	2	2	4
acceptable risk	1	1	2
competition	1	0	1
privatization	1	0	1
infrastructure cost	0	1	1
quality	0	1	1
teaming	0	1	1

[Ref. Created by researcher]

results, performance/past performance was a key factor for both Government and industry. The top factors mentioned by Government respondents were: maximizing use of excess capacity, meeting requirements and past performance. The top issues mentioned by industry were past performance, best value, cost and responsiveness/readiness. Some of the comments by Government respondents:

- Make use of excess capacity. It is important to use existing depot capacity to utilize the labor force, otherwise once they are lost, it is virtually impossible to get them back [Ref. 43].
- As in any acquisition, cost, schedule and performance. If the commercial company can do it better, faster and cheaper, then they should do it. We need to keep a certain amount of depot maintenance in-house to support possible mobilization, but after that any depot work should go to the best value source, be it Government or private industry [Ref. 23].

- It is important to have the ability to meet the needs of the organization and to sustain the work being contracted, especially in an accelerated environment such as wartime emergency [Ref. 46].

Some of the comments by industry respondents:

- The contractor will likely have a better track record as he always searches for efficiencies to increase performance while at the same time reducing operating costs (maximizing profit). Government depots, lacking the fear of competition and allegiance to stockholders that contractors have, have a tendency to get and stay in a "comfort zone" lacking incentive to reduce costs and maximize efficiencies [Ref. 10].
- Most cost effective (total cost) solution that will assure readiness goals in peacetime and war [Ref. 20].
- Best value... best value. The exceptions would be things so critical to National security that they must be done by the Government... real core "capabilities", NSA kinds of things, etc. [Ref. 25].

c. Question 3: Are there any changes you would make to the current 50/50 law restricting outsourcing of depot-level maintenance to 50%? What changes would you make and Why?

Respondents were clearly divided on this issue. All five Government respondents felt that the ratio was reasonable as it stands. There were comments regarding how the process and policy conflicts with current acquisition reform policy. Areas for improvement mentioned by Government respondents included; better resources to improve the Government's in-house ability to write proposals and better use of depot excess capacity.

Conversely, three of five industry respondents felt that the 50/50 law should be repealed altogether while two felt there was a need for a minimum core for in-house

capacity but around the 10 to 20 percent range. The common theme was that the Cold War is over and the focus should be more on cost savings and best value.

Some of the responses from Government:

- I can see both sides of the issue here. On one hand we are strongly preaching acquisition reform. If we are truly following this approach then there should be no restrictions placed on outsourcing. However, though contradictory to acquisition reform, we must realize that if we go to war and we are in a sole-source environment with no depot capability we could have a big problem therefore we should retain some core capacity [Ref. 3].
- Until the Department of Defense can meet the 50/50 rule, I would not recommend changing it. We should always keep whatever minimum capability is required in-house to ensure readiness and support national emergencies [Ref. 23].
- I'd keep the depots fully workloaded to their approved requirement levels. Competition is good, but don't degrade the in-house infrastructure because civilian firms are having to reduce their size. We need to size the whole thing correctly....and then workload both in house and contractors in the best business sense manner [Ref. 45].

Some of the responses from industry:

- Given the fact that the Cold War is over, and assuming that as a taxpayer it would make fiscal sense, I would set some goals to change the split over time allowing sufficient spans for the unnecessary depot activities to be phased out. I would do this purely in the name of reducing the cost of ownership for defense products thereby freeing up funds for other requirements [Ref. 10].
- If you want to save money and you need highly qualified service providers, then you don't need quotas. The first thing we need to get straight is the fact that there is no supportable rationale behind the 50/50 rule. It is pure pork ! [Ref. 19].
- I would make it 10/90 or 20/80. That would give the depots just enough core and preclude them from wanting / having too much [Ref. 25].

d. Question 4: What are the problems with the A-76 process as it affects depot-level maintenance and how would you change the process?

In looking at the responses regarding the A-76 process, the majority on both sides agreed that it takes much too long to complete. Both sides claimed that the process required significant “streamlining”, however few solutions were provided.

On the Government side, in addition to complaints over the lengthy time required, were primarily positive comments towards the MEO process and the 10% adjustment factor for LPTA competitions which were “similar” to what industry would do in the same make or buy decision.

Comments from industry respondents were primarily against the overall A-76 process that it not only was too lengthy but was used to “protect jobs and has no place in a competitive environment”. A common theme was that the overall decision should be based on lowest cost and best value.

Some of the responses from Government:

- It takes way too long. We have been doing A-76 studies for almost 20 years now and we should have a pretty good idea on how to do them. The process can stand some streamlining [Ref. 23].
- With regard to MEO, it is reasonable. Industry does the same and gives their estimate based on their most efficient configuration. The depots should be treated the same [Ref. 3].
- Get an independent agent to assess both Government and contractor side under a specific set of rules and guidelines. Also form an in-house team of experts to assist the Government organization to compete with the colossal contractor efforts. Level the playing field by giving our depot Commanders the tools to compete on paper [Ref. 45].

Some of the responses from industry:

- I would recommend that individual weapon system support be excluded from the A-76 process. A-76 is appropriate for outsourcing of functions not weapon systems [Ref. 10].
- It is too much work. It is not on a level "cost" and "best value" playing field. There are some things that industry simply does not bid because of the process. For industry, it is not worth the cost to propose, nor the risk of not winning [Ref. 25].
- I would like to see some mutually equitable baseline (between industry and Government) on determining the fair value of use of Government resources and Government overhead rates [Ref. 42].

e. Question 5: Do you have any other recommendations to current policy or procedures as they relate to source determinations for depot-level maintenance?

In asking for final recommendations, there were few additional comments provided from the Government respondents. Four of five stated that all comments were already provided in previous questions.

There were more additional comments from industry primarily recommending that DoD handle the process more like a business, reduce the burdensome paperwork requirements and look for a best overall value.

The sole additional comment from Government:

- I have worked on both sides. Both have an equally good chance of winning on their own merit [Ref. 43].

Some of the responses from industry:

- In a climate where defense spending has been reduced by 70% from the Cold War era, fiscal responsibility has to counter the logic that the DoD has to maintain a sizable core support capability. The logic that has prevailed over defense procurement must also prevail over support/sustainment costs. We should open the aperture and reduce this cost without hampering the DoD's ability to count on a support infrastructure in a time of conflict. I would

recommend more attention be put on ways to team/partner/subcontract with the public depots and allow the OEM or private contractor the ability to manage the total efforts. This should enhance the productivity, quality and cost of the public sector portion of the work as “Best Practices” are flowed down and implemented [Ref. 10].

- Eliminate much of the Government-required paper/reports/computer interfaces/etc. that do not add value. Execute work in a more commercial manner... everything is for a business reason versus making work and retaining jobs [Ref. 25].

C. OVERALL ANALYSIS

This survey / interview provides valuable opinions and recommendations that can be used when addressing the issues of depot-level maintenance source decision. However, with a sample size of only ten, its results provide no statistical significance for the overall Government and industry population as a whole.

In the overall responses, there was some common ground regarding the national and defense industrial bases. However, the Government respondents clearly felt that some in-house capability was essential for national security reasons while industry respondents felt that the need for Government in-house capability was minimal or negligible. At first glance, this would be expected as both sides “protect their own turf”. However, of importance to note is that three of the five Government respondents were with the Defense Contract Management Command and if anything, they and their organization had more to gain from increasing outsourcing not limiting it.

The term “insurance policy” was used which can describe positions from both sides. One Government respondent stated that the depots should provide the primary support and industry should be used as the insurance policy for additional requirements.

All of industry respondents felt the converse, in that industry should be the primary supporter of DoD's systems and that the "insurance" was either the depots or was no longer needed.

When looking at which factors that each thought important in making a source determination there was some similarity with past performance a top factor for both. In addition, those top factors indicated by the industry respondents were also highly ranked by Government respondents (cost, best value and responsiveness). The overall primary factor mentioned by Government, utilizing excess capacity, was of no surprise, not mentioned as a priority by industry.

Regarding changes to the 50/50 rule, Government respondents primarily supported the law supporting the need to retain in-house capacity. As would be expected, industry recommended significantly reducing or eliminating the restriction on outsourcing.

Looking at the A-76 process, both Government and industry recommended "streamlining" the process to reduce the lengthy process. But Government by in large, supported the MEO process claiming that industry certainly would not deliberately propose an inefficient process. Industry largely opposed the process as a whole believing that it was unfair to the private sector and was certainly opposed to the MEO believing that the depots should compete in their existing capacity.

D. CHAPTER SUMMARY

Both Government and industry have recommendations to improve current policy and procedures for depot-level maintenance. However, exactly what they believe requires change and the procedures to do so are different. For the majority, they both believe that competition is important between the public and private sectors. They both hold best value and cost to be important however, Government respondents place some priority on maintaining an in-house capability as insurance to a significant risk.

Many of the responses and recommendations regarding questions 1 and 2 are incorporated into the next chapter, "Factors to Consider in Making Depot-Level Maintenance Source Determinations". Many of the recommendations from the remaining questions are incorporated into Chapter VII, "Recommendations and Conclusions".

The next chapter will analyze the literature and survey data to recommend factors to consider when making source determinations for depot-level maintenance.

**VI. ANALYSIS:
FACTORS TO CONSIDER IN MAKING DEPOT-LEVEL
MAINTENANCE SOURCE DETERMINATIONS**

A. INTRODUCTION

There are a multitude of factors which should be considered when making a strategic decision for supporting a major weapon system. Taking the time to plan up-front will alleviate many of the poor decisions made in the past and ensure that the best source is selected in the end.

After reviewing current policies and procedures; looking at the pros and cons of outsourcing, and soliciting recommendations from Government and industry, we will next analyze the factors that should be considered when making a source decision for depot-level maintenance. This analysis considers factors throughout the A-76 process; determining the requirements, developing alternatives and the in-house estimate, and the final source selection under current policy and procedures.

B. FACTORS TO CONSIDER IN REQUIREMENTS DETERMINATION

The requirements determination is the baseline for the Performance Work Statement (PWS) which in turn will drive the organization of the MEO and the contractor's proposal. It is therefore the foundation for the entire process. Those factors to be considered in the requirements determination are:

- Accuracy in the Performance Work Statement
- System to be Supported

- Life-Cycle Planning
- Surge Requirements

As stated in Chapter V and depicted on Table 5-1, meeting the requirements was the top factor as stated by Government survey respondents and an important factor identified by industry as well. Determining requirements correctly is essential for any “make or buy” as discussed in Chapter III, Section B2. For the Government, the baseline for this requirements determination is the Performance Work Statement (PWS). This must consider the system to be supported by tailoring the type of support required to the particular weapon system, such as specialized and low volume support as mentioned in Chapter III, Section C5. The overall life-cycle must be considered, as discussed in detail throughout Chapter II. Finally, any surge requirements should be incorporated into requirements, a key pro-depot concern as discussed in Chapter IV, Section C2.

1. Accuracy in the Performance Work Statement

In developing the Performance Work Statement (PWS), a clear determination of the requirements is essential. What exactly is required to perform the service? A problem leading to poor source selections in the past is that the PWS did not accurately reflect the actual requirements. Therefore, the PWS must be as specific as possible. By the same token, functions that are not essential should be eliminated so that they can be deleted in preparing the MEO estimate (see Section D3 below). Considerations:

- Exactly what are the requirements?
- Does the PWS reflect ALL requirements in the level of detail to be clearly understood by the reader?

- What functions currently performed by the in-house activity can be eliminated or reduced in scope?

2. System to be Supported

Is the system to be supported an existing system currently maintained by in-house depots or is it a completely new weapons system? For maintenance currently being provided it is much easier to determine cost estimates from the in-house activity. For new weapon systems, the process is more complex and absolutely requires a life-cycle approach. Considerations:

- Is the system to be supported a completely new weapon system?
- Who has the most expertise on supporting the particular system?

3. Life-Cycle Planning

As mentioned, particularly for new systems but for older systems as well, the entire life-cycle should be a key factor in the determination process. Life-cycle costs and benefits should be determined to present value cost and should be required by the contractor and in-house activity alike.

For new systems, planning for sustainment has always been a weak link since its benefits are well into the future but cost up-front. There is a definite trend towards the prime vendor concept and away from purchasing of technical data packages. As discussed in Chapter II, Section E, there are advantages to both. Purchasing of technical data up-front is costly in near term dollars but often saves in the overall life-cycle vice the sole-source prime vendor. However, maintenance by the OEM may have qualitative advantages.

A life-cycle consideration which has been historically neglected, is that of cost escalation, which is higher with industry. If outsourced, the contract should include clauses to limit cost escalation for components and services and tie them to a clear baseline such as the national inflation rate, or to actual depot escalation rates.

Considerations:

- What are the true life-cycle costs?
- How accurate is the estimate?
- Long-term vice short-term costs; should the technical data package be purchased or is the prime vendor concept a better value?
- Can cost escalation be controlled and how should it be controlled in the contract?

4. Surge Requirements

What are the requirements to surge in the event of war or national emergency? Chapter III discusses the benefits of depots in this aspect but dual-use manufacturing capabilities have some capability to meet this requirement. For maintenance with competition, this requirement may not be as significant if there are clear alternatives.

Considerations:

- What are the surge requirements?
- What other options are available to assist in surges?
- Can Industry meet the surge requirements?

C. FACTORS TO CONSIDER IN DEVELOPING ALTERNATIVES FOR SOURCE OF SERVICE

There are several potential options for who and how the service can be provided. Depot-level maintenance can be provided by Government depots and arsenals, the private market, by ISSA, or by a partnership between the Government and industry. There may be some potential providers who can be influenced with various incentives.

Those factors to be considered in developing alternatives for the source of service include:

- Risk and Industrial Base Considerations
- Core Requirements and 50/50 Determination
- Stimulating Competition
- Inter-Service Support Agreements
- Prime Vendor
- Partnering/Teaming
- Privatization

As discussed in detail in Chapter IV, risk reduction was an over-riding theme by the pro-depot caucus while industrial base considerations were mentioned by both sides. Identifying core requirements was a key Government concern identified in both Chapters IV and V and may become an even more stringent statutory requirement under the FY99 Defense Authorization Bill (Chapter II, Section D7). Since depot-level maintenance is primarily sole-source as stated in Chapters II and IV, any option which might stimulate competition should be considered. Inter-Service Support Agreements were discussed as alternatives in Chapter III, Section DoD, while Prime Vendor and partnering are current

top DoD priorities (Chapter II, Section E) and specifically mentioned by the pro-outsourcing caucus in Chapter IV. Finally, privatization supports the national industrial base as stated by the pro-outsourcing caucus in Chapter IV, Section B6.

1. Risk and Industrial Base Considerations

As discussed in Chapter IV, the national and defense industrial bases must be considered. If we do not consider the national industrial base we will not know if our depots are getting a good baseline for the way they operate. If we continue to use only one public or private source, the other will eventually dry up. Industry will find more profitable work or the depots will have such excess capacity that they will become inefficient and be forced to close. Considerations:

- What is the maximum adverse impact on the defense or national industrial base?
- What is the risk of losing a defense contractor performing depot-level maintenance?
- What is the risk to the depots? Can we afford to risk losing more in-house capability?
- What is the risk to readiness?

2. Core Requirements and 50/50 Determination

Though highly contested, it is important for DoD to retain some core capacity for such a critical function as depot-level maintenance. As discussed in detail in Chapter II, under current doctrine, the Services determine their core requirements but are restricted by the 50/50 rule.

Unless the law is changed, a core determination must be made. Since outsourcing is currently limited to 50%, care should be taken not to exceed the threshold. It is Recommended that the flexibility of public/private competition be reserved primarily for new weapon system support and systems being currently maintained in-house remain to support the in-house ratio. Considerations:

- Is the maintenance to be provided considered core?
- What is the current Service core ratio?
- If outsourced, will this contract place the Service beyond its 50% outsourcing limitation?

3. Stimulate Competition

As mentioned before, depot-level maintenance is primarily sole-source. Are there ways to stimulate competition? As in common economics, a way to decrease cost is to increase competition. How much competition is likely for a particular maintenance service? How many companies are likely to be interested? Can the workloads be divided into smaller portions or Government-Furnished Property (GFP) be provided, both stimulating competition?

The larger the contract, the more attention it will attract from DoD and Congress. As the case with outsourcing of aircraft maintenance at Sacramento Air Logistics Center (Chapter IV, Section B,2) occasionally DoD and even Congress get involved to entice more sources to compete. Considerations:

- What is the expected competition from industry?
- What can be done to increase the competition?
- Can the work be reasonably and efficiently divided into smaller portions?

- Would the use of GFP increase competition and is it available?
- Is the potential contract significant enough to warrant DoD or Congressional intervention to encourage competition?

4. Inter-Service Support Agreements

The current in-house capability and the contractor are not the only options. It is important to consider Inter-Service Support Agreements (ISSA). Other Services may have similar maintenance contracts or provide a similar service within one of its depots. The ISSA allows another Government organization to add its requirements to existing requirements of another contract or onto the existing depot workload. Considerations:

- Is another Government organization providing the same or similar depot-level maintenance service at its depots or arsenals?
- Does another Government organization have an ongoing maintenance contract which provides a similar service?

5. Prime Vendor

An alternative, which takes advantage of the equipment manufacturer's expertise, is the prime vendor concept. Prime Vendor is a truly a "cradle to grave" acquisition process where depot-level maintenance becomes a requirement for the acquisition of a major weapon system [Ref. 18:p. 45]. As a general rule, life-cycle maintenance costs for new systems are estimated at twice the system's acquisition cost creating a tremendous incentive for a major defense contractor [Ref. 62:p. 6]. It also provides additional incentive for the contractor to make depot-level maintenance easier since the designer and builder will also be the maintainer.

However, if not monitored it can create additional problems based on its lack of competition for depot-level maintenance once awarded. A carefully written contract may be able to alleviate some of these problems providing for awards for exceptional readiness rates and penalties for poor rates if the system falls below a certain level.

Considerations:

- Is the original equipment manufacturer interested in support maintenance?
- Who can provide the best support?
- What is the contractor's past history on cost escalation?
- Do the overall benefits created by this sole-source alternative outweigh its disadvantages?

6. Partnering / Teaming

Partnering is becoming increasingly popular as an option in source determinations. It combines the expertise of the current in-house Government entity and at the same time, the business expertise of industry. It not only allows the Government personnel to oversee the contractor but to team together where all parties are contributors to the final product [Ref. 30:p. 13]. It usually allows the contractor to use Government facilities and equipment already in place and performing the depot-level maintenance activity. Considerations:

- Does the situation warrant considering a partnering agreement?
- Is there industry interest in such an agreement?
- Consider which functions and responsibilities will become that of the contractor or remain with Government?

7. Privatization

Privatization is the most extreme of outsourcing where the Government completely divests itself from the service and sells equipment, data packages and real estate to the contractor. In considering this option, serious consideration needs to be made since once privatized, the facilities and equipment will no longer be Government property. Considerations:

- Is the Government depot subject to BRAC?
- Can DoD afford to completely lose the capabilities if the contractor defaults?
- What benefits can be derived from privatizing?
- Is the contractor a past performance risk?

D. FACTORS TO CONSIDER IN DEVELOPING THE IN-HOUSE ESTIMATE

Because large contracts will use past performance data as selection criteria, all depot-level maintenance contracts will be awarded using a best value source selection approach. As such, the Government must provide a proposal, which will compete with a business savvy contractor. This is a new requirement for the Government, which if not properly done will result in an inferior in-house estimate and possibly selecting a wrong source. Those factors to be considered in developing the in-house estimate include:

- Lessons Learned from Previous Studies and Good References
- Select a Project Champion for the In-House Proposal
- Preparing the Most Efficient Cost Estimate
- Excess Capacity and Workloading
- Cost Considerations

With the examples of poor contracts stated throughout this study, use of lessons learned becomes of key importance so not to repeat similar source selection mistakes. Chapter V, Section 2B, discusses the importance of expertise in preparing the in-house proposal. This also necessitates a motivated project champion to oversee the Government proposal effort. The MEO remains the baseline for the in-house proposal as discussed in Chapter III, Section D3. Efficient use of excess capacity and workloading was mentioned as a primary concern by the pro-depot caucus in Chapter IV, Section C2, and a top concern by Government survey respondents as depicted in Table 5-1. Finally, the in-house estimate must consider all costs to include indirect, which are often difficult to determine.

1. Lessons Learned and Good References

To get started, good references and lessons learned are a must. OMB Circular A-76 is not the only reference the Commander should have to conduct an A-76 study and make a source selection. A CNA study revealed that A-76 studies usually do not build on the experience of previous such studies. Most are started without examining lessons learned in similar A-76 studies. The Services have since developed a broad range of generic performance work statements.

Both the Army and Air Force have established software templates. The Air Force developed a PC- based program called “COMPARE” which allows for easy cost comparisons [Ref. 51:p. 17]. The Army uses FENYX software which automates the performance work statement. They both have their benefits however, currently the two software programs are not yet interoperable and MEO data must be manually loaded in the COMPARE software [Ref. 51:p. 18].

Other sources of information and procedures that should be followed include:

- DODD 4100.5, Commercial Activities Program
- DODI 4100.33, Commercial Activities Program Procedures
- DA PAM 5-20, Army Commercial Activity Study Guide
- AF Outsourcing Guide for Contracting
- Air Force A-76 information on the www.afcesa.af.mil/AFCESA/Contracts.

2. Select Project Champion for In-House Proposal

Just as in a major acquisition of a new weapon system, a major A-76 study also needs a project champion [Ref. 31:p. 20]. Of course it is important for the Commander to lead by example and provide enthusiasm for the study, but in preparing the in-house estimate he may run into a conflict-of-interest if he is involved in the source selection process. It is therefore important to have a good manager who will champion the in-house proposal. This individual should have a vested interest in the activity to provide the intrinsic motivation necessary to ensure a good proposal [Ref. 36:p. 10].

Considerations:

- Does the manager for the in-house proposal have the leadership, competence and expertise to lead the effort to prepare the in-house estimate?
- Does he have the motivation to provide the best possible proposal?
- Is the cost estimation team impartial, or at least are the figures being audited by an impartial source?

3. Preparing the Most Efficient Organization Estimate

Once the true requirements are determined, the in-house activity must develop the MEO estimate. It is important that the MEO is developed not just as the most efficient

organization under the current requirements, but under the requirements in the PWS. The MEO is allowing the in-house activity to be as efficient as possible and in many cases reduces some of the administrative or non-value added functions in the process.

The MEO should be reviewed by an individual with expertise in the area but as impartial as possible to ensure that the configuration can meet the requirements.

Considerations:

- Does the MEO reflect the requirements in the PWS?
- Is the MEO reasonable given the requirements to be performed?
- Is the MEO reviewed by an impartial individual?

4. Excess Capacity and Workloading

Given current excess capacities of depots, it is wise to increase their usage to a more efficient level. This not only makes them more efficient, it supports the core policy, and can be done without the extensive A-76 requirements. In making cost determinations for the in-house estimate, excess capacity should be considered. DoD's standard 12% overhead should not apply if the Commander can justify that overhead and indirect costs will be minor by inclusion of the additional work. Considerations:

- What is the existing excess capacity of the depot performing similar maintenance?
- Can the depot take the additional workload without significantly expanding capital equipment or real estate?
- To what extent are direct and indirect cost increases solely related to the additional work generated loads?

5. Cost Considerations

The most challenging part for the in-house activity is to properly account for all costs. This is even more challenging since costs must be developed based upon the MEO estimate of the organization. Per A-76, the cost team should be a central or field agency study team and, due to the likely large size of the contract, should be audited by DCAA. The cost comparisons must be accurate and include ALL costs on both sides. They should consider infrastructure costs required for the initial set-up. Costs such as relocating Government employees, selling off or transporting Government property and contract administration must also be taken into account. The comparison must also adjust to account for the difference in Government and business accounting systems so as not to disadvantage the contractor for insurance, taxes, or other costs that the Government would not pay.

A standard 12% is added to the in-house estimate for overhead costs unless the organization can prove a different rate (see related topic at D,3 above). Commanders should develop actual overhead costs for their in-house activities to more accurately determine the true total costs. A true one-for-one comparison is difficult, and time consuming but the end result will be the critical document in determining whether or not to outsource the depot maintenance function. Considerations:

- Are all direct costs included?
- What are infrastructure costs?
- Are all costs associated with the termination of the activity included?
- Is an adjustment made for insurance, taxes, or other costs which the Government does not pay?

- Can actual overhead costs be determined? Otherwise use the standard 12%.

E. FACTORS TO CONSIDER IN THE SOURCE SELECTION PROCESS

When down to the final public/private source selection, there are some special considerations that should be made to ensure the proper team, proper contract type and proper evaluation factors are used. Those factors to be considered in the final source selection process are:

- The Source Selection Team
- Selecting the Contract Type
- Selecting and Weighing Evaluation Criteria
- Final Selection and Contract Award

With the overall purpose of the source selection process to fairly determine the best value source-of-repair, the important factor is impartiality. As mentioned in Chapter II and in Chapter V, Section 2B, industry has often felt that public/private competitions favor the Government with the source selection team partial to the competing Government depot using evaluation criteria weighted to the in-house advantage. Selection of an impartial source selection team using relevant evaluation criteria with the appropriate contract type can help to ensure that the final selection is not only the best overall value for the Government, but “levels the playing field” as stated by Deputy Defense Secretary, John Hamre in Chapter III, Section C3.

1. The Source Selection Team

As in any team selected for a similar major project, the basics such as good leadership, motivation, expertise and organization are key. A good team is essential.

However, key to the source selection team is impartiality. Like the auditor, the source selection team should be impartial, preferably a central agency, or at the senior DoD level. This may be particularly challenging for those individuals who work at the facility affected by the study. However, impartiality is a must since the consequence could be a sustained protest and even worse, a wrong decision. In May 1998, Defense Secretary William Cohen removed the acting Air Force Secretary, Whitten Peters, from the source selection process during a depot competition involving Sacramento Air Logistics Center in an effort to make the source selection process as independent as possible [Ref. 77:p. 7].

One recommendation to ensure impartiality is to rehire retired functional personnel to work on the MEO study team. This provides the expertise necessary and reduces the partiality since the final results of the competition will have no effect on these personnel [Ref. 51: p. 24]. Considerations:

- Does the source selection team possess the contracting and technical expertise to make the selection?
- Is the source selection team impartial?
- What options are available to ensure impartiality, such as using rehired functional experts?

2. Selecting Contract Type

Many depot-level maintenance contracts are fixed-rate price using a time and materials type contract where all the cost of the services and components are determined up-front. Fixed-rate prices are usually more applicable where adequate repair history exists to establish a price range for the maintenance work. The more complex the service, the more likely a cost reimbursement type contract will be required. For new weapon

systems, cost reimbursement contracts are usually more feasible since historical cost data is not yet established and the contractor would be unwilling to perform the services on a fixed-rate price basis without a significant safety factor which would render the contract cost ineffective [Ref. 58:p. 6].

Incentives and awards should be considered to emphasize key important requirements such as cost, quality and turnaround time. Results based contracts can take the form of a Fixed-Price Incentive-Firm (FPIF) or Cost-Plus Incentive-Fee (CPIF) for incentivizing cost savings or schedule performance or Cost-Plus-Award-Fee (CPAF) and the hybrid Fixed-Price-Award-Fee (FPAF), if incentivizing other factors such as quality. The Contracting Officer can be creative and create other hybrid contract types and use both incentives and awards to optimize the end result. Considerations:

- Are the services routine enough and adequate repair history in place to warrant a Fixed-Price type contract?
- What key requirements could be incentivized by contract type?
- Consider all contract types and hybrids of each to achieve optimal results.

3. Selecting and Weighing Evaluation Criteria

For such a major source selection as depot-level maintenance, a best value source selection is a must. To maximize the benefit of the best value process, the evaluation criteria selected should truly reflect their relative importance of the requirements in the PWS. In developing the RFP, the evaluation factors will be the critical determinate regarding who will win the competition. Cost, past performance and the technical proposal must all be considered.

Cost will be a critical factor and must be carefully determined since when comparing the in-house cost estimate to the private proposal, several adjustments are made to adjust for accounting differences before the two estimates are evaluated against each other. Use OMB Circular A-76 and software templates (mentioned in Section D1 above) to ensure a proper comparison.

Of primary importance is past performance and quality, which can very well determine the success or failure of a depot maintenance contract. Past performance is the best indicator for future performance and service quality. As such, past performance should not only be a primary factor, but rigorously scrutinized during evaluation. Past performance is even more important where limited private competition is expected.

The technical proposal is weighed against several sub-factors. These sub-factors should be weighted it in a manner in that corresponds to the importance of the service to be performed. Considerations:

- What is most important in this source selection?
- How much competition is expected? The lower the competition, the greater the importance of past performance.
- What is most important in the technical proposal? Weigh accordingly.

4. Final Selection and Contract Award

Here is where the technical experts, logisticians, and mechanics earn their metal and must answer the questions; Is the technical approach feasible? How will the contractor prioritize workload? What will he do in the event of national emergency? Is he willing to deploy his employees to conflict areas if needed? The bottom-line here is, does he truly know what he is signing up for? A proposal for an undertaking as large as

depot maintenance will be tremendous and complex. The Government must make absolutely certain the contractor understands the requirements and is encouraged to ask questions and that all answers and additional information are provided to all interested contractors in an RFP modification. The bottom line is communication. Considerations:

- Are the technical approaches feasible?
- Are all costs considered?
- Have all requirements in Section L been met?
- Are all plans included and is there an adequate plan for surge capacity?
- Plan in advance for pre-proposal conferences and walk throughs to ensure that the requirements are understood.
- Has the RFP been modified and is the contractor's proposal based on the latest modification?

F. CHAPTER SUMMARY

There are many factors that must be considered in the source determination process to ensure that the end result is the best overall value for DoD. These can be broken down into four specific areas; determining the requirements, developing alternatives, developing the in-house estimate and the final source selection.

Like a Program Manager planning a major weapon system procurement, the key is to plan in advance. The extra time dedicated in the planning process is time well spent since the end result is not only time wasted in correcting deficiencies but can result in the wrong source selection and a long-term and potentially costly mistake.

The next chapter will summarize this study, provide conclusions and recommendations, and provide the answers to the original research questions.

VII. CONCLUSIONS AND RECOMMENDATIONS

A. SUMMARY

With the end of the Cold War, a changing threat environment and changing priorities from our senior leadership, DoD is attempting to be more “businesslike” in its operation. With a focus on cost savings and efficiency, DoD looks to get the best value for its shrinking portion of the budget by turning to industry to take over its non-core commercial activities. Giving the Services more flexibility in determining core requirements, an increasing number of depot-level maintenance functions have become outsourced placing DoD in potential conflict with Congress and statutory law limiting such outsourcing. As such, depot-level maintenance remains a controversial topic with DoD senior leadership and industry supporting outsourcing and Congress, Government logisticians and depot employees supporting the depots.

OMB Circular A-76 provides the procedures required for public/private competition. These procedures have often been criticized by industry claiming that they give preference to the Government in-house estimate. In keeping with its push to the private sector, DoD has made some changes to the process in an effort to “level the playing field”. These changes emphasize the use of best value, past performance and provide for a 12% overhead rate to be applied to the Government in-house estimate.

When making a decision to outsource, transfer a function to another Government entity, or to continue to provide the service, our leadership must look at many factors and options to ensure that DoD truly does get the best value. In planning up-front,

Commanders must look at the requirements determination, developing source alternatives, preparation of the in-house estimate and the final source selection process.

In looking at current policy and practice there is reason for concern. Years ago, the depot system was the preferred choice for support. The pendulum of change has swung completely in the opposite direction with DoD in complete support of outsourcing. However, in its rush to outsource many important factors are being ignored with current policy not only emphasizing outsourcing but often requiring it without any in-house cost comparison. DoD's policy results in little attempt to utilize in-house excess capacity by restricting much of the work the depot can perform and deliberately minimizing its ability to attain new work. Furthermore, in practice, both life-cycle costs and core requirements are largely ignored often resulting in bad source selection decisions.

B. CONCLUSIONS

1. DoD policy on core requirements is confusing and contradictory. Industry also makes core determinations for the products the sell or services they render. Those functions deemed "core" are critical to the company as a whole and are not outsourced, or at least not entirely. This core may change if the overall objectives of the company change to providing different products or services. DoD's objectives have not changed. Though the end of the Cold War has brought changes to our strategy, the overall mission of DoD is still to provide for the defense of the United States and its interests.

As stated in Chapter II. Section D2, DoD policy on core states "Core represents the minimum amount of organic depot facilities to ensure that contingency operations are not compromised because of a lack of essential depot maintenance support". At the same

time, DoD states that “Long-term contractor support is the preferred approach for new and modified systems” (see Chapter II, Section D4). This clear preference for industry contradicts the purpose for the core determination. With current trends towards outsourcing, eventually all in-house capability will disappear as old systems are replaced and new systems are supported by the contractor.

2. DoD is focused on short-term savings, not life-cycle costs. DoD is not making a source determination for strategic purposes. As demonstrated in Chapter II, Section E, long-term life cycle costs are largely ignored in favor of immediate savings. In many cases, industry can provide the immediate savings that DoD desires, resulting in increased outsourcing. However, as discussed in Chapter IV, Section B1, DoD is experiencing significantly higher overall cost escalation rates with industry than with its in-house depots, particularly for military unique components and services. Though the pro-outsourcing caucus could cite examples of studies that estimated savings for ALL commercial services and could cite instances of lower industry costs at the time of contract award, there is little evidence to support that in the long term industry will save DoD money except for COTS components maintenance. Since most DoD maintenance is military unique and given current trends, industry on the average will have a higher long term cost.

This short-term look is ingrained within Government as a whole and especially DoD. Both the Executive and Legislative branches and the taxpayer want to see immediate results. The same applies to military officers involved who want to get the credit for their efforts while on “their watch”. The system as a whole promotes the focus on short-term benefits which industry is capable of providing.

3. DoD policy is partially responsible for creating the excess capacity problem. DoD does not manage excess capacity well. DoD recognizes the benefit of the "excess" in as far as surge capacity is concerned but evidence indicates that its makes poor attempt to otherwise make use of such excess capacity. When a company considers a "make or buy" decision it actively looks at its in-house excess capacity and makes outsourcing comparisons against the optimum utilization of existing excess capacity. As addressed in Chapter II Section E, both in practice and policy, DoD's in-house depot capability is being ignored. Unlike any sound business practice, DoD places restrictions on its in-house capacity magnifying the excess capacity problem. As discussed in Chapter II, Section D, DoD restricts depots from performing non-core work even if more economical. Second, it places a preference for outsourcing to maintain new systems eliminating any chance of reducing excess capacity, and finally enforces the 12% standard overhead even if added workload is well within existing excess capacity and would cause only a minuscule change in overhead costs. Since 91% of depot-level maintenance is sole-source, it is foolish to deliberately restrict or eliminate DoD's in-house capability and give a monopoly to the contractor. This does not garner a best value scenario and certainly is not a "businesslike" practice that would be found within industry.

4. The current competition procedures are time consuming but overall are fair to industry. The overall A-76 process is clearly too time consuming, however the process does appear to be fair to industry. The MEO process is certainly not unlike what industry would do under the same conditions. If during the "make or buy" decision process, a company determined more efficient ways of doing business, it would certainly

compare their in-house estimate using these procedures. The best value source selection procedures are certainly fair to industry since the Government and industry compete based solely on the merits of their proposals. The 12% overhead attached to all Government in-house is an improvement at least from the industry standpoint. However, DoD should continue to strive for actual overhead rates which may be above or below 12%.

5. Both the Government depots and industry have benefits. As stated in the Pros and Cons in Chapter IV and in the survey discussion in Chapter V, both have benefits. Using industry to provide depot-level maintenance provides certain advantages including its access to technology, Prime Vendor expertise, preserving the national defense base and short-term cost savings. The depots can boast lower specialty and long-term costs, priority on national security, surge capacity and proven expertise. However, these benefits are broad and generic, and will vary depending upon the type of maintenance service, the competitive environment and the individual advantages between the depot and companies competing for the work.

Where feasible, partnering has proven advantages by combining the benefits of both Government and industry. It provides sustainment for both the defense and the national industrial bases and allows the Government to retain needed facilities and equipment in the event of national emergency or contractor failure.

C. RECOMMENDATIONS

1. Better define core. Since best value largely depends on competition, perhaps core should be defined with a relationship to competition. For equipment or major

assemblies that are clearly COTS in nature, a core capability by DoD may not be required and industry may be able to take the full workload (if it is cost effective). However, since 91% of DoD's depot-level maintenance requirements are sole-source, a core is clearly required or industry will have a clear monopoly. Therefore the 50% limitation on outsourcing is justified and should be retained.

2. Enforce life-cycle determinations. The Services must consider the entire life-cycle cost when making a source determination. This requires a major mind shift throughout DoD, Congress and the Executive branch. Industry's higher cost escalation must be considered. One option is to have the contractor commit to a set maximum cost escalation rate throughout the expected life-cycle of the system to be supported. Another, is to set cost escalation limits in line with those at the depots, having them adjusted each year as depot costs change. This would require better cost tracking at the depots, and would also result in a better overall comparison of costs between Government and industry.

3. Make use of excess capacity and combine depots. There are many ways DoD can make better use of excess capacity. First and foremost it should not place any restrictions on the depots in competing for non-core work. If the depots can provide the best value for non-core work, they should have the opportunity to compete. Second, the depots should be more jointly oriented rather than Service unique. Since all Services have aircraft, combine the work for similar systems where feasible. Remaining excess capacity should be leased out when possible to a related industry. A radically new idea would be to allow DoD to sell its maintenance services to the heavy equipment industry, which the researcher understands, would require appropriate legislation.

4. Increase use of partnering. DoD can maximize the benefits of both industry and the depots through partnering. By partnering, DoD can retain the vital facilities, equipment and many of the skilled workers, to ensure ready capability and at the same time utilize the expertise of industry for new business practices and techniques. This provides for work both in the depots and with industry, thus supports both the defense and national industrial bases.

5. Provide more training for those involved in the preparation of in-house proposals. With all depot-level maintenance solicitations being awarded under best value, the Government must provide a proposal which will be compared to that of the expert contractor. This is new for the Government and requires additional training to "level the playing field" with the contractor. Contracting personnel, not associated with the source selection process should be involved in the preparation of the in-house estimate. Furthermore, DoD needs to provide detailed training for those involved in preparing the estimate.

6. Outsource A-76 support. To support the Commander and to help expedite the long process, much of the A-76 process could be contracted out. As mentioned in Chapter VI, retired depot employees could be rehired or contracted to assist in the preparation of the in-house estimate and possibly the requirements determination. If needed, independent auditors could assist DCAA.

7. Continue to adopt better accounting procedures. The Government as a whole needs to continue to improve upon its accounting procedures. Though the objectives of Government are different than that of industry, it should not preclude it from adopting more businesslike cost accounting practices. This will allow the

Government to better compare its costs to those of industry in public/private competitions as well as more accurately determine the cost of Government.

D. ANSWERS TO THE RESEARCH QUESTIONS

1. What factors should be considered when determining the source for depot-level maintenance services for the Department of Defense?

There are many factors that must be considered when determining the provider for depot-level maintenance. Chapter VI discusses each in detail. This starts from the requirements determination process to developing alternatives and the in-house estimate to the final source selection process. These factors are divided into the above mentioned categories.

Factors to consider in the requirements determination:

- Performance Work Statement: Does it include everything and is it written to ensure both sides fully understand requirements?
- System to be Supported: Is the system requiring the service an existing system where is the service is already being performed successfully in-house or is it a completely new weapon system under development?
- Life-Cycle Planning: Is the ENTIRE life-cycle being considered so that the focus is on the long-term benefits?
- Surge Requirements: If surge capacity is a factor, is it expressly stated and detailed to ensure the selected source has the ability to meet the requirement in event of crisis or war?

Factors in developing alternatives for source of service:

- Risk and Industrial Base Considerations: How are the national and defense industrial bases affected?
- Core and Statutory Requirements: Is the requirement core and if outsourced, will it place the Service in excess of the 50% statutory limitation?
- Competition: What is the competition for this particular system to be supported?
- Inter-Service Support Agreements: Can we use another contract or other in-house capability?
- Prime Vendor: Is it more feasible than purchasing technical data packages to retain in-house capability and potential future competition?
- Partnering/Teaming: Can we combine the benefits and capabilities of both Government and Industry?
- Privatization: Can DoD benefit from privatizing the current depot?

Factors to consider in developing the in-house estimate:

- Lessons Learned and Good References: Are we utilizing all available resources?
- Project Champion for In-House Proposal: Have we selected the best people to prepare the in-house estimate, especially its leadership?
- Excess Capacity: Are we maximizing the use of our current excess capacity and what would be the impact of additional work?
- Preparing the MEO: Is the MEO realistic and based upon the optimum scenario?

- Cost Considerations: Have all costs been considered?

Factors to consider in the source selection process:

- Source Selection Team: Is the source selection team impartial?
- Selecting Contract Types: Is the right contract type being used to maximize best value to DoD?
- Selecting and Weighing Evaluation Criteria: Do the evaluation criteria reflect their true relative importance?
- Final Selection and Contract Award: Is the right source being selected?

2. What is the current policy towards determining the source for depot-level maintenance in DoD?

DoD emphasizes that depot maintenance is, and continues to be, vital to our national security. It delegates to the Service Components responsibility to provide an adequate program for maintenance of assigned material. The Services must establish core depot maintenance capability to meet wartime demands, promote competition and sustain institutional expertise. Core represents the minimum amount of maintenance capability that the DoD Component must maintain in organic depots to ensure that contingency operations are not compromised due to a lack of essential depot maintenance support.

DoD continues to use a combination of public and private sources to support capabilities to provide essential levels of readiness and sustainability. DoD is clearly in a paradigm shift favoring the private sector with the organic depots limited in performing new systems maintenance and restricted from performing non-core work.

Public Law 10 United States Code 2466 limits the private sector to no more than 50% of the defense dollars allocated to depot-level maintenance. This percentage was just increased from 40% as part of the FY98 Defense Authorization Bill. This law counters DoD's efforts favoring the private sector and creates controversy as the private sector's portion grows closer to its 50% limit. Chapter II discusses current policy in detail.

3. How does current policy affect outsourcing of depot maintenance?

DoD's emphasis on the private sector has clearly resulted in an increase in outsourcing of depot-level maintenance with 40% currently performed by the private sector. This percentage continues to increase since 65% of new systems are expected to be supported by the private sector. At the current rate, by the year 2001, 54% of DoD's weapon systems will be supported by the private sector.

However, the continued increase in outsourcing comes into conflict with current statutory law under Public Law 10 United States Code 2466 limiting outsourcing to 50%. Recommended changes to the 1999 Defense Appropriations Bill provides mandatory A-76 studies for the next six years and adds restrictions to control outsourcing as it closes in on the 50% maximum limit. In reviewing current practices, all Services, except the Army, are largely ignoring outsourcing requirements and the amount of depot-level maintenance outsourced continues to increase.

If this policy remains, with depots restricted from competing for non-core work and limited in competing for new maintenance requirements, the portion maintained in the depots will continue to decline. In addition, since DoD is not investing in infrastructure to keep its depots modern this will further exacerbate the problem and make the depots less competitive. As they become dinosaurs, Congress will eventually

be compelled to increase the outsourcing authorization or eliminate Public Law 10 United States Code 2466 altogether.

3. What are the current procedures for public/private competition?

The A-76 process governs the procedures for public/private competition. For fixed-price solicitations under Invitation for Bid (IFB), the Government must determine the in-house costs based upon its Most Efficient Organization (MEO). This MEO cost estimate is then compared to the lowest private bid. If the private bid is 10% lower than the Government MEO, the contractor is awarded the contract.

Since most depot-level maintenance type contracts require past performance as a criterion, a Request for Proposal (RFP) is required. The process is similar using MEO for its cost estimate but requires the Government to submit a proposal like that of the contractor. There is no 10% cost adjustment as is the case with LPTA solicitations.

There are some exceptions which allow the Government to forgo the long A-76 comparison process (See Chapter II, Section 2 for details).

5. How do current procedures for public/private competition impact outsourcing of depot-level maintenance?

Many contractors have voiced opinions that the process takes too long and they feel that the MEO process and the 10% adjustment for IFB solicitations is unfair. However, in practice, industry follows a somewhat similar process and will not outsource for minuscule gains. Some contractors are undoubtedly discouraged to attempt to bid or submit a proposal to compete against a Government in-house entity, however, never before has industry competed under such favorable conditions. DoD clearly shows a preference for the private sector for commercial functions with the in-house entity now

required to add 12% for overhead, the in-house entity now losing the benefit of the 10% adjustment in best value considerations, and in several instances the in-house entity restricted from even competing.

When looking specifically at depot-level maintenance, there are very few contractors capable of performing the service with 91% of contracts awarded sole-source. These contractors are not likely to be discouraged by the process since it has improved towards their favor in recent years and they have so much to gain by continuing to participate. New entrants to depot-level maintenance are unlikely except possibly through privatization or de-scoping of requirements to smaller portions that can attract less capitalized companies.

E. AREAS FOR FURTHER RESEARCH

There are many opportunities and different avenues to approach depot-level maintenance outsourcing issues. Some possible areas for further research include:

1. Develop a draft DoD policy on depot-level maintenance.
2. Take an in-depth look at the affect on cost escalation specifically for depot-level maintenance contracts versus in-house depot costs to determine long term cost escalation affects.
3. Develop statistical templates for the Services to determine core, readiness, and industrial base requirements.
4. Look at techniques for successful privatization of depot-level maintenance activities through previous privatization attempts.

APPENDIX A. SURVEY QUESTIONNAIRE

Questionnaire DoD Depot Level Maintenance Outsourcing

Purpose and Scope of Questionnaire:

The purpose of this questionnaire is to examine current policy and procedures for source determinations of depot-level maintenance of combat systems. Both Government and industry officials are encouraged to participate to ensure representation from both sides. Your input will be used for thesis research to recommend factors that should be considered when making a source decision on depot-level maintenance and to make recommendations that may impact current procedures or policy.

B a c k g r o u n d

What is Depot-Level Maintenance?

Depot-level maintenance includes repair, rebuild, upgrade, major overhaul, testing and manufacture of major components. Government depots operate at about 60% capacity and currently provide about 52% of total depot maintenance requirements with the remainder outsourced to industry. Statutory law limits outsourcing to 50% in an effort to protect core capability, ensure readiness, and have the capacity to surge in the event of national emergency.

Who can Provide?

Depot-level maintenance can be provided by Government in-house capability at existing arsenals and depots, by industry, or by partnering between Government and industry.

What is the Current Process?

When considering a Government activity for outsourcing the A-76 process is used. This requires a detailed analysis of the activity being considered for outsourcing and can take up to 4 years to complete. The Government conducts a Most Efficient Organization (MEO) study which gives the in-house estimate its optimum best value even though the function may not be currently configured in that manner. The MEO is then competed against the contractor's proposal and the lowest price or "best value" is selected. If the in-house activity wins the competition, it must get into its MEO organization within 1 year.

What is the Current Policy?

DoD considers depot-level maintenance to be a core function, however, it has eased up considerably since the end of the Cold War as to who can provide this service. "Core exists to minimize operational risks and to guarantee required readiness for these systems." "Core depot maintenance capabilities will comprise of only the minimum facilities, equipment, and skilled personnel necessary to ensure a ready and controlled source of required technical competence."

How is Outsourcing of Depot-level Maintenance Limited?

Outsourcing of depot-level maintenance is limited by 10 U.S.C. title 2466 which limits it to 50% the total dollars budgeted for depot-level maintenance.

A. General Information:

1. Rank/Grade/Rate _____
2. Phone number _____
3. Name _____
4. Email Address _____
5. Job title Manager _____
6. Number years with Government or current employer _____
7. Organization (if gov.) or Company _____
8. Contracting Experience in years _____

B. Familiarity with Issues:

1. Are you familiar with the current restrictions on depot-level maintenance outsourcing and that outsourcing is limited to 50% of total depot-level maintenance dollars? _____
2. Are you familiar with the A-76 process for public/private competition? _____

C. Questions

1. Should the national industrial base or defense industrial base be considered in making source determination decisions for depot-level maintenance? If so, how should they be considered and why or why not?

2. What factors should be considered in making source of determination decisions for depot-level maintenance? (source determination can be between contractors, public depots, or between public depot and contractor)

3. Are there any changes you would make to the current 50/50 law restricting outsourcing of depot-level maintenance to 50%? What changes would you make? Why?

4. What are the problems with the A-76 process as it affects depot-level maintenance and how would you change the process?

5. Do you have any other recommendations to current policy or procedures as they relate to source determinations for depot-level maintenance?

Thank you for your participation. Your input will be incorporated into my thesis research.

WHEN COMPLETED, SEND YOUR COMMENTS TO:

“fordwhaas@aol.com”
or
Major William M. Ford
Naval Postgraduate School
2 University Circle
Student Box # 1387
Monterey, CA 93943-1387
or
Fax: 408-656-3176
Fax; please send ATTN: Maj. I.

If you would like this survey sent to you e-mail please contact me at:
fordwhaas@aol.com

Major William Ford

APPENDIX B. ACRONYMS

AGM	Aerospace Guidance Meteorology
ALC	Air Logistics Center
BASOPS	Base Operations Support
BENS	Business Executives for National Security
BMDO	Ballistic Missile Defense Organization
BRAC	Base Realignment and Closure
CBO	Congressional Budget Office
CFO	Chief Financial Officer
CIA	Central Intelligence Agency
CNA	Center for Naval Analysis
CONUS	Continental United States
CORM	Commission On Roles and Missions
CPAF	Cost-Plus-Award-Fee
CPIF	Cost-Plus-Incentive-Fee
DCAA	Defense Contract Audit Agency
DCMC	Defense Contract Management Command
DoD	Department of Defense
DSB	Defense Science Board
FAR	Federal Acquisition Regulation
FASAB	Federal Accounting Standards Advisory Board
FFMIA	Federal Financial Management Improvement Act

FPAF	Fixed-Price-Award-Fee
FPIF	Fixed-Price-Incentive-Firm
FTE	Full Time Employee
GAO	General Accounting Office
GDP	Gross Domestic Product
GOCO	Government-Owned Contractor-Operated
GM	General Motors
IFB	Invitation For Bid
ISSA	Inter-Service Support Agreement
JCS	Joint Chiefs of Staff
JFMIP	Joint Financial Management Improvement Program
LPTA	Low Price Technically Acceptable
MEO	Most Efficient Organization
OEM	Original Equipment Manufacturer
OMB	Office of Management and Budget
OSD	Office of the Secretary of Defense
R&D	Research and Development
RFP	Request For Proposal
SOW	Statement Of Work
TOW	Tube-launched Optically guided Wire

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